CLEANSPACE AGILE

USER GUIDE

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Contents

Before using your CleanSpace AGILE, read and understand this User Guide, including all warnings, guidance on the correct use of filters and accessories, and any relevant national standards. For detailed instructional supplements and product further product information, visit www.cleanspacetechnology.com

For support, contact CleanSpace Customer Service on +61 2 8436 4000 or email sales@cleanspacetechnology.com

⚠	Throughout this User Guide, this symbol will highlight important warnings.

⚠	This product is part of a system that helps protect against certain airborne contaminants. Misuse may result in sickness. For proper use, consult an Occupational Health Specialist, this User Guide, the CleanSpace AGILE User Instructions or contact CleanSpace Technology Customer Support at sales@cleanspacetechnology.com.

⚠	Properly selected, used and maintained respirators help to protect against certain airborne contaminants. It is essential to follow all instructions and government regulations on the use of this product, including wearing the complete respirator system during all times of exposure, for the product to help protect the wearer. Misuse of respirators may result in overexposure to contaminants and lead to sickness.

⚠	CleanSpace AGILE respirator components, including the Facepiece and Power Unit, are specifically designed as an integrated system and are not interchangeable with any other respirator components. This applies to all products identified with a CSA product code. Components such as CST ULTRA Power Units, CST Half Masks, and CST Full Face Masks must not be used in combination with CleanSpace AGILE systems. Use of non-compatible components may compromise performance, safety, and regulatory compliance.

1. Quick Start

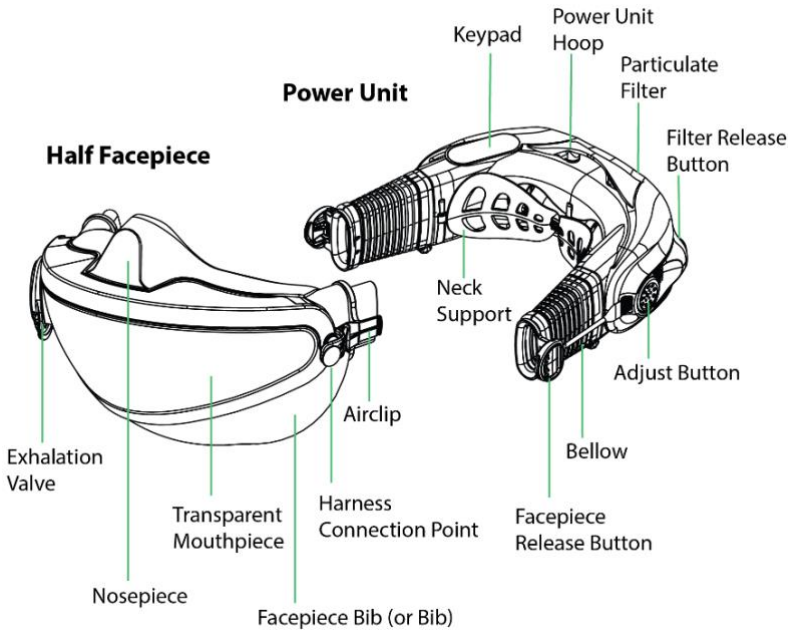
1.1. CLEANSPACE AGILE QUICK START

This Quick Start section outlines the essential steps for using your CleanSpace AGILE safely. For full instructions, specifications and technical detail, refer to the relevant sections of this User Guide along with the User Instructions.

The CleanSpace AGILE is a loose-fitting Powered Air Purifying Respirator (PAPR) certified for protection against particulates. It draws ambient air through a filter using a fan and supplies filtered air to the wearer via a loose-fitting Facepiece that does not seal to the face.

In normal use it operates in breath-responsive mode - the motor blows harder during inhalation and softer during exhalation, maintaining positive pressure inside the facepiece to prevent hazardous particles from entering. CleanSpace AGILE has been specifically certified suitable for users with facial hair and clean-shaven users. It provides TH2-level protection.

1.2. SYSTEM COMPONENTS



Key Components:

- Power Unit - Motor / Fan, Battery, Keypad and Filter
- Half Facepiece - Silicone Nosepiece, transparent mouthpiece and neoprene bib (loose-fitting)
- Filter - Particulate Filter
- Neck Support - Fitted to the Power Unit and provides a comfortable fit (Small or Medium)
- Head Harness - Supports weight of Power Unit; adjust for comfort and fit (Not Shown)
- Bellows & Adjust Buttons - Adjustable for comfort and fit

1.3. PRE-USE CHECKLIST

Complete all checks prior to use.

✓	CHECK
☐	Battery charged - all 3 green Battery Charge Indicator lights are solid green. A full charge is recommended.
☐	Filter fitted and undamaged - seal clean and free from damage; no dust on internal surfaces; no cracks on body.
☐	Power Unit undamaged - no cracks, missing parts or damage to bellows.
☐	Facepiece undamaged - no cracks or tears. Exhalation valve seated flat and clean. Bib securely fitted.
☐	Head Harness intact - not frayed or damaged; good elasticity.
☐	Neck Support correct size - use the smallest size that is comfortable. If Medium is too tight, use no Neck Support.
☐	Recalibrate - Complete, if needed (see Section 3.2).
☐	Flow Test - Passed (see Section 3.3)
☐	No active alarms - ensure no alarm lights or alarms are active before entering (see Section 1.5).

1.4. QUICK DONNING

See section 4 for full donning instructions with detailed guidance and images.

STEP 1	**Fit Neck Support to Power Unit** Select the correct size of Neck Support and snap onto the inner side of the Power Unit. Press firmly until it clicks into place.
STEP 2	**Fit Head Harness to Facepiece** Connect the two side straps of the Head Harness to the circular harness connection points on the outside of the Facepiece. Confirm the Bib is securely fitted to the Mouthpiece.
STEP 3	**Fit Facepiece to Power Unit** With both Facepiece and Power Unit facing up, connect the right-hand side of the Facepiece to the Power Unit. Extend both Bellows by pressing the Adjust Buttons whilst gently pulling the bellows outward.
STEP 4	**Switch to Standby Mode** Press the Power Button once. Battery Charge Indicator lights will illuminate.
STEP 5	**Don the Respirator** Drape Power Unit behind your neck. Place Facepiece on your face. Adjust the bib under your chin. Connect the left-hand side of the Facepiece to the Power Unit.
STEP 6	**Adjust** Adjust harness side straps and rear harness strap for a comfortable fit. Adjust the bellows symmetrically to tighten or loosen the fit.
STEP 7	**Check Fit** Breath normally - the motor automatically switches to ON Mode and breath-responsive mode starts. Confirm AGILE is operating in breath-responsive mode (the fan speeds up on inhale and quietens on exhale). If it does not, do not enter the contaminated area.

1.5. ALARM QUICK REFERENCE

Learn these alarms before entering a contaminated area. Respirator alarms are clearly audible in most noisy environments. If there is a risk, they may not be heard, follow the special precautions in Section 5.1

ALARM		ACTION REQUIRED
Safety Mode Alarm	1 beep every 5 seconds	Check for leaks/missing parts. Adjust respirator for a better fit. LEAVE the contaminated area - if the alarm continues.
Filter Change Alert	2 beeps every second Red Filter Light flashes	LEAVE the contaminated area / DO NOT ENTER the contaminated area. Replace the filter.
Low Battery Alarm	3 beeps every second 1 green light flashes	IMMEDIATELY LEAVE the contaminated area. Recharge battery.
Filter Absent Alarm	1 continuous beep Red Filter Light flashes	IMMEDIATELY LEAVE / DO NOT ENTER the contaminated area. Install filter before use.
Low Flow Alarm	4 beeps every second Red Filter Light flashes	IMMEDIATELY LEAVE the contaminated area. Check battery and filter condition.

Leave the contaminated area immediately if:

- The motor stops.
- Any alarm sounds or flashes (Low Battery, Low Flow, Filter Absent, Filter Change Alert) or the Safety Mode Alarm does not silence after adjusting the respirator.
- Any part of the respirator is damaged.
- Airflow decreases or stops.
- Breathing becomes difficult.
- You feel dizzy or your airway is irritated.
- You can taste or smell contaminants.

2. System Description

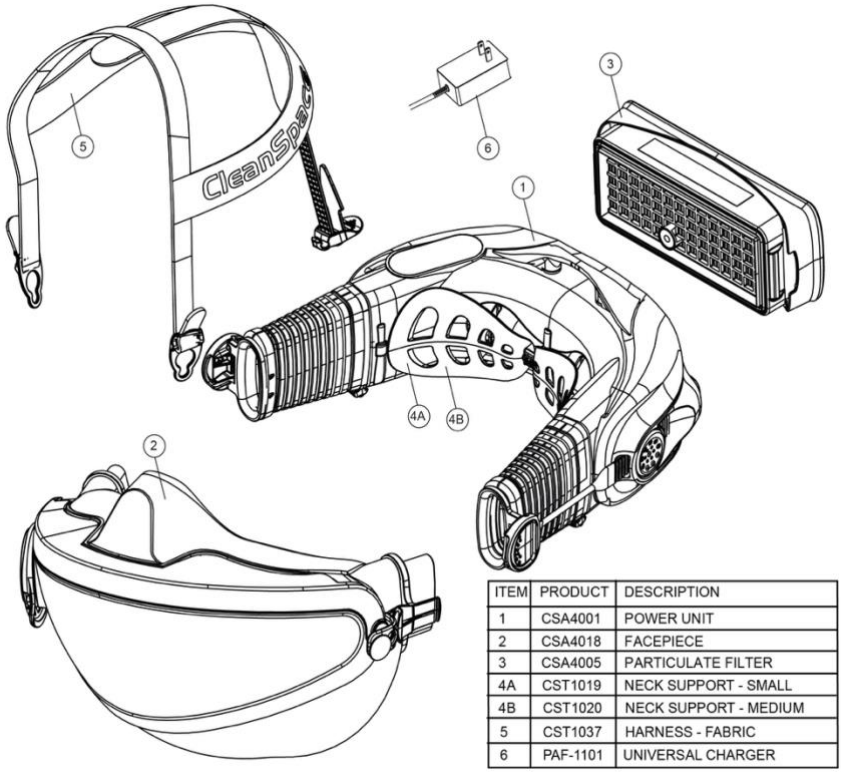
CleanSpace® AGILE is a loose-fitting powered air-purifying respirator (PAPR) that provides protection against particulates. It is certified to TH2 level. The device is suitable for users with facial hair, as well as those without facial hair.

It draws ambient air through the filter using a motor and fan, which supplies filtered air to the wearer via a loose-fitting Facepiece. In normal use the respirator operates in breath-responsive mode - meaning it blows harder during inhalation and more softly during exhalation. It uses a Facepiece comprised of a silicone nose piece and a neoprene bib. The Facepiece does not form a seal to the wearer's face and the protective effect of the PAPR stems from sufficient air being supplied to prevent hazardous substances leaking into the Facepiece. If the respirator cannot detect breathing, it reverts from a breath-responsive mode to a safety mode and a warning will sound. Should it again detect breathing, it resumes breath-responsive operation.

The system is intended to protect the user against inhaling hazardous particles present in the atmosphere at concentrations below certain levels. CleanSpace AGILE provides TH2-level protection. Refer to local standards for an Assigned Protection Factor and do not use AGILE against contaminant concentrations which exceed the safe exposure level by more than the assigned protection factor.

2.1. COMPONENTS

For a list of components and their respective part numbers refer to Section 9.

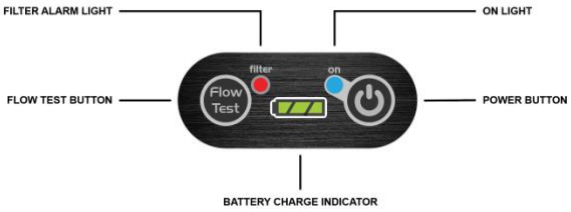


ITEM	PRODUCT	DESCRIPTION
1	CSA4001	POWER UNIT
2	CSA4018	FACEPIECE
3	CSA4005	PARTICULATE FILTER
4A	CST1019	NECK SUPPORT - SMALL
4B	CST1020	NECK SUPPORT - MEDIUM
5	CST1037	HARNESS - FABRIC
6	PAF-1101	UNIVERSAL CHARGER

2.2. CONTROLS AND INDICATORS

2.2.1. KEYPAD

A keypad is located on the top of the Power Unit. It contains all controls and indicators.



2.2.2. POWER BUTTON

The Power Button is used to switch the operating mode of the CleanSpace AGILE. There are three operating modes.

Mode	Description
OFF	Unpowered. No airflow. Battery Charge Indicator not illuminated. Press Power Button once to switch to Standby Mode. CleanSpace AGILE cannot be manually switched to OFF - it automatically switches off after 3 minutes in Standby Mode.
STANDBY	Actively monitoring. No airflow. Battery Charge Indicator displays battery charge. If breathing is detected, CleanSpace AGILE will automatically switch to ON Mode.
ON: - Normal Operation (Breath Responsive Mode)	Actively monitoring and delivering filtered air. Blue 'on' light illuminated. If breathing cannot be detected, reverts to Safety Mode and alarm sounds. Press Power Button once (after doffing) to switch to STANDBY Mode.
ON: Non -Normal Operation (Safety Mode)	This is not a normal operating mode and is only used when equipment breakage or other misadventure causes a leak too large to permit breath-responsive operation. Use in Safety mode for more than a few seconds triggers an alarm (See section 2.3.1)

2.2.3. BATTERY CHARGE INDICATOR

Green lights on the keypad indicate battery charge level and approximate remaining runtime when NOT on charge.

Battery Charge Indicator	Battery Charge (%)	Approximate Useful Time Remaining (hrs)*
 3 Green Solid Lights	80 – 100 %	5 - 7 hours
 2 Green Solid Lights	50 – 80 %	3 – 5 hours
 1 Green Solid Light	20 – 50 %	1 – 3 hours
 1 Green Flashing Light	5 –20 %	<1 hour
 1 Green Flashing Light and Low Battery Alarm	< 5 %	< 15 minutes (Leave contaminated area immediately)
 Unpowered	0 %	0 minutes (non-normal operation)

** Operating time is influenced by filter loading, fitment of facepiece (including bib and nosepiece), work rate, altitude, and other factors. Actual operating times may vary.*

2.2.4. FLOW TEST BUTTON

When in Standby Mode, pressing the Flow Test Button initiates the Flow Test, checking the respirator can deliver a minimum flow of 190 l/min. **Refer to Section 3.3 for instructions on running the flow test.**

2.3. ALARMS

All alarms sound at 75dB(A) at ear. Refer to the Alarm Quick Reference table in Section 1.5 for a summary.

2.3.1 SAFETY MODE ALARM

Triggered when the respirator reverts to Safety Mode due to a large leak or missing component.
Aural Alert: 1 beep every 5 seconds.
Action: Check for leaks and missing components. If breath-responsive mode resumes and the alarm stops, work may continue. If the alarm does not stop, leave the contaminated area immediately.

2.3.2 FILTER CHANGE ALERT

- Triggered when the filter exceeds service limits (i.e. filter is blocked).
- May sound at the beginning (during donning) or at the end (during doffing) of a work session.
- May sound during the doffing process when the respirator runs a filter condition check (See Section 5.5)
- Aural Alert: 2 beeps every second. Visual Alert: red flashing Filter Alarm light.
- Can be muted by pressing the Power or Flow Test Button once. If the filter is not replaced, the alert will resume when the CleanSpace AGILE next switches to STANDBY Mode (usually during the next donning process).
- If triggered with a new filter: recalibrate the unit (see Section 3.2).

⚠	If the Filter Change Alert is triggered, the filter has exceeded service limits and must be changed before re-entry. Using an overloaded filter may cause flow to fall below the minimum, risking overexposure to contaminants.

2.3.3 LOW BATTERY ALARM

Triggered when remaining runtime is approximately less than 15 minutes.

- Aural Alert: 3 beeps every second Visual Alert: 1 green flashing Battery Charge Indicator light.
- Cannot be muted.

⚠	If the low battery alarm triggers, leave the contaminated area IMMEDIATELY and recharge the battery. Using the respirator after the Low Battery Alarm has triggered can cause the flow to fall below the minimum design flow. This may result in overexposure to contaminants.

2.3.4 FILTER ABSENT ALARM

Triggered when the respirator is in ON Mode and no filter is present.

- Aural Alert: Continuous beep. Visual Alert: Red Filter Alarm Light flashes.
- Can be muted by pressing Power or Flow Test Button once. Resumes after 1 minute if no filter is installed.

⚠	If the Filter Absent Alarm triggers, leave the contaminated area IMMEDIATELY and investigate. Install a filter before entering the contaminated area. Using the respirator without a filter installed will provide no respiratory protection. This may result in overexposure to contaminants and lead to sickness.

2.3.5 LOW FLOW ALARM

Triggered when the Power Unit can no longer deliver 190 L/min.

- Aural Alert: 4 beeps every second. Visual: Red flashing Filter Alarm Light.

⚠	If the Low Flow Alarm triggers, leave the contaminated area IMMEDIATELY. Check battery charge and filter condition. Using the respirator after the Low Flow Alarm has triggered can cause the flow to fall below the minimum design flow. This may result in overexposure to contaminants.

2.4. BATTERY

CleanSpace respirators have an internal lithium ion (Li-ion) battery. Lithium ion (Li-ion) batteries have the highest energy density of all battery types and are widely used in portable electronic devices. CleanSpace respirators use quality Li-ion batteries and are designed to be viable over a minimum of 500 complete charge and discharge cycles while still maintaining at least 70% of their specified full capacity. For detailed battery information refer to the Product Information section of the CleanSpace website cleanspacetechnology.com.

2.4.1 LONG TERM BATTERY STORAGE

CleanSpace AGILE utilises an intelligent chip which manages battery consumption when the unit is in power off mode. When the battery reaches 70% (or below) in power off mode, the chip is activated to cut off almost all power sources which drain the battery - taking the battery into 'Storage Mode'. Long term battery storage technology enables the CleanSpace AGILE to maintain significant battery charge whilst in storage for up to one year.

2.4.2 BATTERY PRECAUTIONS

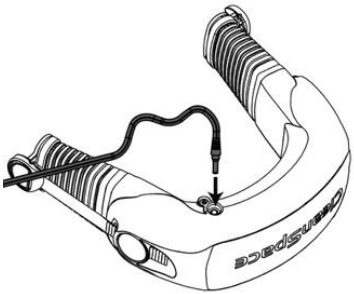
- **Avoid mechanical shocks or impacts.**
- Do not use if there is any sign of severe mechanical damage.
- Do not expose to extreme heat. Battery will be damaged above 70°C. Respirator will stop functioning if its internal temperature rises above 60°C or falls below -10°C.
- Do not dispose of by incineration.
- Do not use in heavy rain or allow immersion in liquid.
- Do not disassemble the Power Unit. Disassembly voids the warranty. There are no user-serviceable parts inside.

⚠	Always correctly use and maintain the internal lithium-ion battery. Failure to do so may result in fire or explosion or adverse respirator performance and result in injury, sickness or death. CleanSpace AGILE is not intrinsically safe. Do not use in flammable or explosive atmospheres.

2.4.3 CHARGING THE BATTERY

To charge the battery:

1. Locate the charging port on the underside of the Power Unit.
2. Ensure the Universal Charger is plugged into a power source.
3. Insert the charger cable connector into the charging port.
4. Charging is indicated by at least one green flashing Battery Charge Indicator light.
5. When fully charged, three green solid lights display. If the third light flashes rapidly, charging is 95% complete.
6. Disconnect the charging cable when fully charged.



IMPORTANT: To ensure the battery is 100% charged, ensure the charger is connected to the Power Unit and the Battery Charge Indicator lights all turn on solid green (no flashing).

⚠	Charge the battery only between 0°C and 35°C, in non-hazardous areas, away from flammable liquids, gases or heat sources. Do not wear the respirator while charging. Only use the CleanSpace Universal Charger. Do not charge with any other charger. Do not charge in enclosed cabinets without ventilation.

2.5. FILTER

2.5.1 FILTER PRECAUTIONS

- Always change the filter outside of the contaminated area and with the respirator doffed.
- CleanSpace filter media cannot be cleaned. Cleaning the filter media may cause damage. The filter media is contained within a filter case. The filter case may be wiped with a dry cloth free of chemicals.
- Used filters should be disposed of responsibly and treated as non-recyclable hazardous waste (dependent on the contaminant being filtered).
- Change the filter if it is damaged or there is suspected damage.
- Filters should be changed regularly. The frequency of filter replacement depends on several factors: period of use, concentration of airborne contaminants, exertion levels and workplace protocols where hazards present a risk for cross contamination (e.g. biohazards or asbestos).

⚠	Do not use compressed air or a brush to clean the filter. HEPA filters are very easily damaged. CleanSpace AGILE does not use gas filters and does not provide protection against gases; it is intended for protection against particulates only. Only use CleanSpace AGILE filters with CleanSpace AGILE. Use of other filters may result in overexposure.

2.5.2 CHANGING THE FILTER

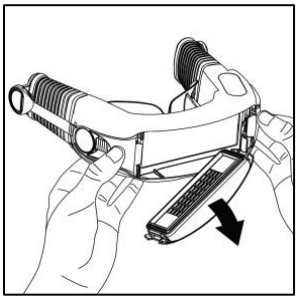
Change the filter when any of the following apply:

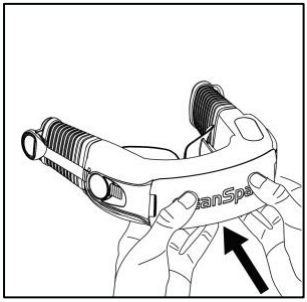
- The Filter Change Alert triggers.
- The Filter Absent Alarm triggers but a filter is fitted.
- The Low Flow Alarm triggers with a fully charged battery.
- Flow Test fails with new filter, fully charged battery and correctly set altitude.
- Filter media has been exposed to water or other liquids.
- The outside of the filter case is heavily soiled.
- There is any sign of damage or suspected damage.
- The filter reaches its expiry date (marked on the filter label).
- Dust or contaminants are visible on the inside surface of the filter.

Remove a used filter: Press either Filter Release Button (refer to Section 1.2) and the filter will be released.

Install a new filter: Align the filter so ‘CleanSpace’ text faces up and push the filter towards the Power Unit until you hear a click. Confirm the filter is seated securely.

A CleanSpace AGILE with a clean filter will run significantly longer than one with a loaded filter. In high dust environments, change the filter frequently to maximise battery runtime.



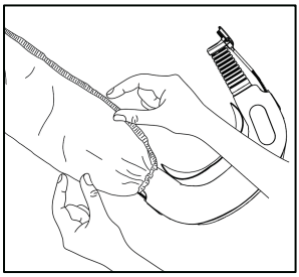
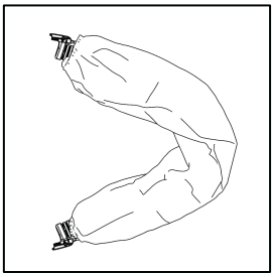
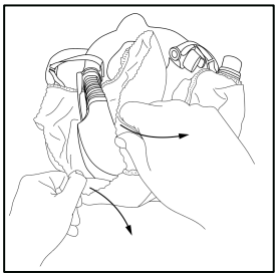


2.6. ACCESSORIES

2.6.1. PARTICULATE PRE-FILTER COVERALL

The CleanSpace Particulate Pre-Filter Coverall is an optional accessory used to cover the Power Unit and remove coarse particulates before they reach the main filter. The Pre-Filter Coverall should be changed after each use and should be fitted after fitting the Neck Support (if required).

It can be removed by tearing it along the seam. This is useful in situations where the coverall has been used in more hazardous environments as it allows it to be disposed of responsibly whilst maintaining the respiratory protection of the user.

3. Before Donning CleanSpace AGILE

3.1. PRE-USE INSPECTION

Before each entry into a contaminated area, carry out a visual inspection of all components. Replace any missing or damaged parts with approved parts only before proceeding.

3.1.1. POWER UNIT

- Check for damage or missing parts. Do not use if there is any damage or evidence of misuse.
- Check both bellows for splits, holes or distortion. Distorted bellows may obstruct airflow.
- Check battery charge by pressing the Power Button. A full charge is recommended.

3.1.2. NECK SUPPORT

Check the Neck Support for any damage, correct size and that it is securely fitted to the Power Unit.

CleanSpace AGILE is supplied with two Neck Support sizes: Small (S) and Medium (M). Select the smallest size that is comfortable. If the Medium (M) Neck Support does not provide enough room (i.e. both bellows are fully extended and the facepiece feels tight), use the respirator without a Neck Support. This configuration provides additional room and is still comfortable due to the curved design of the case.

Selecting the right sized Neck Support is vital to achieving a good respirator fit. With the correct sized Neck Support, the Facepiece should sit comfortably without using up all the travel in the respirator's bellow adjustment system. This gives an opportunity to adjust the respirator further for increased comfort and freedom of movement.

3.1.3. FILTER

Check the FILTER carefully for damage. Check it is securely fitted to the Power Unit.

The filter seal must be clean and free from damage of any kind. Examine the visible internal surfaces for any sign that dust has penetrated the media. If dust is found, do not use the filter. The body of the filter must be free of cracks or signs of damage. If any sign of impact or scratching is found, discard the filter.

Fit the filter to the respirator (refer to Section 2.5).

3.1.4. FACEPIECE (INCLUDING NOSEPIECE AND BIB)

Check the Facepiece to ensure that there are no cracks, tears or dirt. The silicone nosepiece should be in good condition with no tears. Check the Exhalation Valve (on the right side of the transparent mouthpiece):

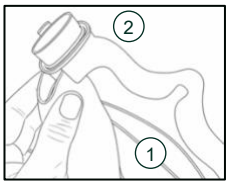
- Gently rotate the cover to inspect. Remove any dirt that could affect the seal.
- Check the valve seat is clean and the valve is lying flat. Replace the valve if damaged.

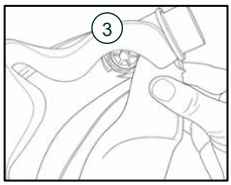
Check the neoprene bib to ensure that there are no tears and that it is fitted securely to the mouthpiece.

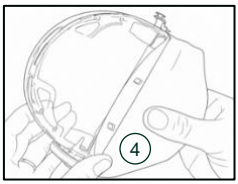
Attaching the Bib

The bib must be securely attached to the mouthpiece prior to use. It may be removed for cleaning or storage between use.
How to attach the Bib to the Mouthpiece.

1. Position the peak of the bib so that the bib frame rests inside the base of the transparent mouthpiece.
2. Attach one side of the bib to the mouthpiece. Ensure that the silicone nosepiece seal sits over the bib. Push it in to secure in place.
3. Attach the other side of the bib to the mouthpiece by repeating step 2.
4. Gently pull the bib down until the two tabs click into position on the mouthpiece. This secures the bib in place.







Click or scan QR to view:
Bib replacement video.

Do not use CleanSpace AGILE with a tight-fitting mask. AGILE is not compatible with any other masks or facepieces.

3.1.5. HEAD HARNESS

Check the Head Harness is intact, is not frayed or damaged and has good elasticity. The Head Harness is a required component for use with the CleanSpace AGILE System.

It is used to support the weight of the Power Unit and to ensure a good, comfortable fit. Adjust the straps of the harness so it sits comfortably on the crown of your head.

3.2. RECALIBRATION

This respirator contains a system for synchronizing with your breathing, regulating facepiece pressure and updating the operating altitude. Recalibrate the internal pressure sensor if the respirator experiences a temperature change of more than 20°C, an altitude change of more than 300m, or before first use. Also recalibrate if the unit has been in storage and storage temperature is unknown.

Recalibration procedure:

1. Remove the filter and Facepiece (if fitted) from the Power Unit.
2. Place the respirator on a stable surface.
3. With the respirator in Standby Mode, press the Power Button and the Flow Test Button simultaneously.
4. When both the blue On Light and the red Filter Alarm Light illuminate, release both buttons.
5. Do not touch or move the respirator during recalibration.
6. After 5 seconds, air will blow from the left-hand bellow for approximately 10 seconds.
7. When airflow stops, recalibration is complete. Battery Charge Indicators return to showing battery charge status.
8. Refit the filter to the Power Unit.

⚠	You must recalibrate the internal pressure sensor any time that your CleanSpace AGILE is exposed to changes in temperature of more than 20°C, changes in altitude of more than 300m or before using the respirator for the first time. It is best practice to also recalibrate if the unit has been in storage, particularly if the storage temperature is not known.

3.3. FLOW TEST

The Flow Test checks that the CleanSpace AGILE can deliver a minimum flow of 190 l/min. This test should be completed before each entry into a contaminated area.

3.3.1 FLOW TEST PROCEDURE

1. Leave the filter in place (The Facepiece must not be attached to the Power Unit for the Flow Test).
2. Place the respirator flat on a stable surface and ensure the bellows are not twisted or bent.
3. Ensure the Power Unit is in STANDBY Mode. If in OFF Mode, press the Power Button once.
4. Press and release the Flow Test Button.
5. The respirator will automatically run the Flow Test. Air will flow from the left-hand bellow.
6. The blue 'on' light will illuminate and the flow test result will display.
7. Once the flow test has run, the blue 'on' light will extinguish and the unit will display battery charge before switching OFF.

Flow Test Result	Meaning		Note
3 Solid Green Lights	PASS	Flow > 190 l/min	Power Unit switches OFF after a few seconds
3 Flashing Green Lights	FAIL	Flow < 190 l/min	Do not use until a flow test results in a PASS

3.3.2 FAILED FLOW TEST

Fit a new filter and/or fully charge the battery, then repeat. If the respirator still fails with a new filter and full battery, recalibrate to ensure altitude is set correctly. If it continues to fail, contact CleanSpace Technology and do not use the respirator until it has been evaluated. If the respirator continues to fail the flow test, contact CleanSpace Technology and do not use the respirator until it has been evaluated.

IMPORTANT: The Flow Test is NOT a battery charge test. Three solid green lights confirm flow capability at that moment - not full battery charge. Check battery charge separately (see Section 2.2).

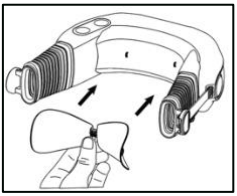
4. Donning CleanSpace AGILE

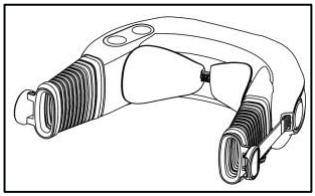
Assemble your Power Unit, Facepiece, Neck Support and Head Harness. Ensure a clean filter is fitted to the Power Unit.

Important: Read through this entire chapter before beginning to don CleanSpace AGILE.

STEP 1 – FIT THE NECK SUPPORT TO THE POWER UNIT

The Neck Support has circular openings at each end which snap over buttons on the Power Unit case. Position the Neck Support in place and press firmly until it clips securely into place.

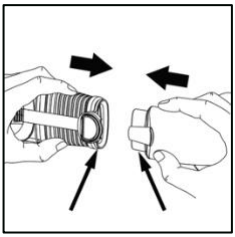


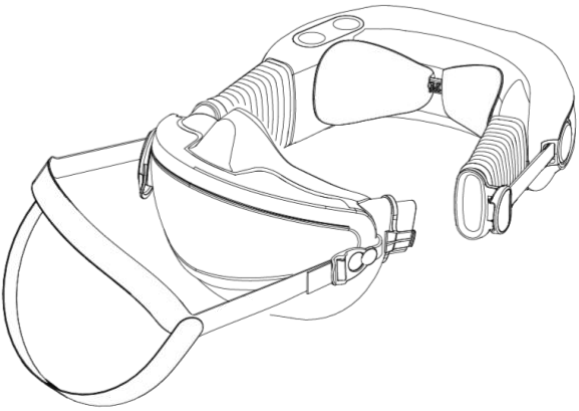


STEP 2 – FIT THE HEAD HARNESS TO THE FACEPIECE

Connect the two side straps of the Head Harness to the circular clips located on the outside of the facepiece.

STEP 3 – FIT THE FACEPIECE TO THE POWER UNIT





Firstly, check the Half Facepiece.

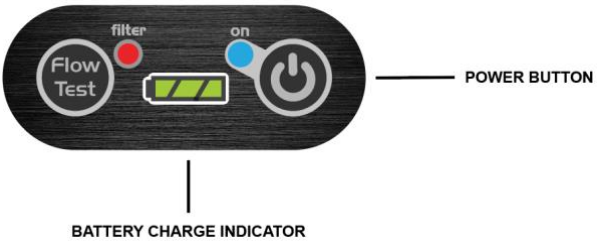
- The bib frame is securely snapped down into the mouthpiece.
- The sides of the bib are securely in place.
- The silicone seal is sitting clear of any obstructions.

Ensure both the Facepiece and the keypad on the Power Unit are facing up. Connect the **right-hand side** of the Facepiece and Power Unit together until the AirClips click into place. Extend the Bellows by pressing the Adjust Buttons on each side of the Power Unit whilst gently extending the bellows away from the Power Unit.

STEP 4 – SWITCH THE POWER UNIT TO STANDBY MODE

Press the Power Button once to switch from OFF mode to STANDBY Mode. The Battery Charge Indicator should display the level of charge. Ensure the respirator is fully charged before use.

⚠	Do not use in Power OFF mode. The AGILE facepiece does not seal to your face and relies on the fan to provide protection.

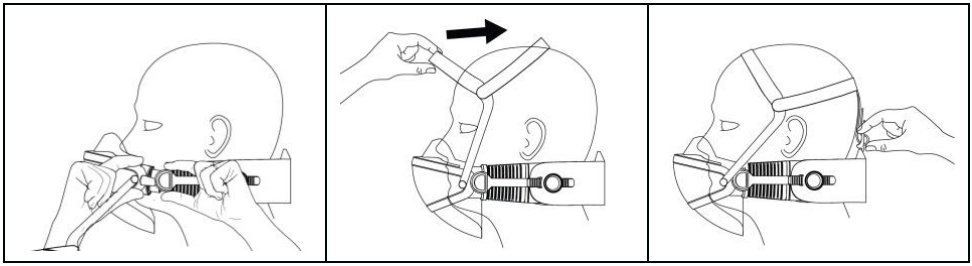


STEP 5 – DON THE RESPIRATOR

1. Drape the Power Unit around the back of your neck with the facepiece positioned in front of your face.
2. Place the facepiece onto your face. Adjust the bib so you can feel the edge pressing lightly under your chin.

> For large beards, do not try and tuck your beard into the bib. Smooth your beard back towards your neck and extend it below the bib, so that the bib rests over it.

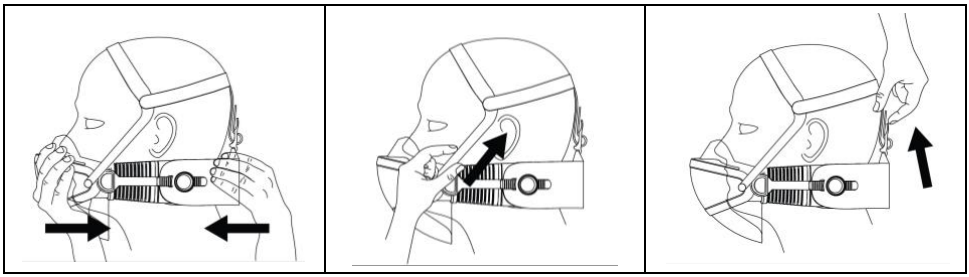
3. Connect the **left-hand side** Airclip.
4. Breathe in, the Power Unit will automatically switch to ON Mode.
5. Pull the Head Harness backwards until it sits comfortably on the crown of your head.
6. Locate the rear harness hook and attach it securely to the Power Unit Hoop.



STEP 6 – ADJUST THE RESPIRATOR

Ensure the facepiece is secure and stable on your face. You should feel a light pressure on the back of your neck from the Power Unit. It should not feel uncomfortably tight. The respirator can be adjusted after donning by either tightening the bellows and/or tightening the head harness.

- Tighten the bellows by placing one hand on the back of the Power Unit and one hand over the front of the facepiece. Push the Power Unit forwards and the facepiece backwards, tightening the fitment. Ensure bellow adjustments are symmetrical. If the bellows are fully tight and the respirator feels too loose, change the Neck Support for the smaller size. If the facepiece is too tight, loosen the bellows by pressing the Adjust Buttons.
- Tighten the side straps of the harness until there is little weight on your nose.
- Tighten the rear hook by pulling upwards on the back strap. Ensure respirator sits approximately level.



STEP 7 – CHECK THE RESPIRATOR

Whist donning, continue to breath normally. The CleanSpace AGILE uses Airsensit® technology to detect your breathing and will automatically switch to ON Mode. The two checks below confirm the respirator is working correctly and fitted well before you enter the contaminated area.

Check 1: Does breath-responsive control start?

The fan should increase in speed as you inhale. If it does not, there may be a large gap between the facepiece and your face, or a component may be missing. Close any gaps by adjusting the bellow via the adjust buttons and harness straps, then try again. If breath-responsive control still does not start, do not use AGILE — contact CleanSpace for assistance.

Check 2: Does the motor go quiet when you breath out?

During exhalation, the motor should reduce to a low speed. If there is no reduction in fan speed, a gap may be present between the facepiece and the face, or a respirator component may be incorrectly fitted. Adjust the respirator to minimise leakage - a proper fit will also improve battery life.

If the Power Unit does not switch ON at all, check that it is in Standby Mode and that all components are in place: Head Harness, Neck Support, Facepiece and Power Unit.

If breath-responsive control does not start during donning, do not use the CleanSpace AGILE. Contact CleanSpace for further investigation.

Recognising Safety Mode

If the AGILE repeatedly enters Safety Mode or remains in Safety Mode for more than a few seconds, this indicates large gaps between the facepiece and your face. Leave the contaminated area immediately and adjust the facepiece and harness until breath-responsive control is re-established and stable.

You can distinguish the two modes by sound: in breath-responsive mode the fan speeds up and slows down as you breathe. In Safety Mode the fan runs at a constant speed and an alarm sounds - one beep every five seconds.

5. The Contaminated Area

5.1. NOISY ENVIRONMENTS

Respirator alarms are clearly audible in most noisy environments. If there is a risk they may not be heard, take the following additional precautions.

- Do not enter the contaminated area unless all three (3) green Battery Charge Indicator lights are illuminated.
- Do not work in a high noise area for more than four (4) hours. At the end of four (4) hours, leave the contaminated area and check:
  - the Filter Alarm Light is not illuminated; AND
  - all three (3) green Battery Charge Indicator lights are still illuminated.
- If two (2) or fewer green Battery Charge Indicator lights are illuminated, recharge the CleanSpace AGILE until three (3) solid green lights are displayed.
- If the red Filter Alarm Light is illuminated, change the filter.
- Be particularly aware of difficulty breathing or of the powered airflow stopping. If either of these things occur, exit the contaminated area immediately.

5.2. ENTERING THE CONTAMINATED AREA

- Ensure the motor is responding to your breathing (i.e. breath-responsive mode).
- Familiarize yourself with the Adjust Buttons and the Facepiece Release Buttons.
- Check no alarms are sounding or flashing. If your work environment is noisy, you may be unable to hear the alarms**.** In this case you must follow the special precautions set out in Section **Error! Reference source not found.**.
- If additional PPE is required, ensure this is donned also.
- Enter the contaminated area.

⚠	Do not remove the respirator until you have left the contaminated area. If you experience an acute health episode (e.g. dizziness) and believe removing the respirator while exiting may help, remove it with caution.

5.3. EXITING THE CONTAMINATED AREA

Leave the contaminated area immediately if any of the following occur:

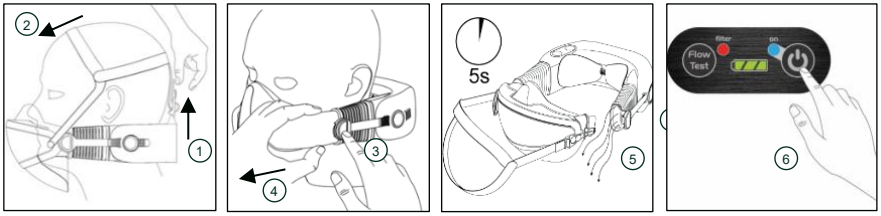
- The motor stops.
- The Filter Change Alert, Low Battery Alarm, Filter Absent Alarm or Low Flow Alarm triggers.
- The respirator enters Safety Mode and readjusting does not restore breath-responsive mode.
- Any part of the system becomes damaged.
- Airflow into the facepiece decreases or stops.
- Breathing becomes difficult.
- You feel dizzy or your vision is impaired.
- You smell or taste contaminants.
- Your face, eyes, nose or mouth experience irritation.
- You suspect the concentration of environmental contaminants has reached levels at which this respirator may no longer provide protection.
- Oxygen/carbon dioxide levels change such that PAPRs should no longer be worn.

Follow the exiting and decontamination procedures as documented in the workplace Respiratory Protection Program alongside the doffing instructions below.

5.4. DOFFING CLEANSPACE AGILE

1. Unclip the rear hook of the Head Harness from the Power Unit Hoop with a twisting motion.
2. Slide the harness forward over your head, toward the nose of the facepiece.
3. Press the left-hand side Facepiece Release Button to disconnect the Facepiece from the Power Unit.
4. Remove the respirator from your face.
5. Allow the Power Unit to run for at least five (5) seconds. A filter condition check will run (refer to section 5.5).
6. Press the Power Button once to switch to STANDBY mode. After 3 mins in STANDBY mode, the Power Unit will switch OFF.

If the Safety Mode Alert sounds during doffing, press and hold the Power Button to switch the Power Unit to STANDBY mode.



5.5. FILTER CONDITION CHECK

During doffing, the respirator must run for at least five (5) seconds after being removed. During this time a Filter Condition Check runs to assess whether the filter is suitable for the next work session. If not, the Filter Change Alert will sound. If the filter is not replaced, the alert will sound when the respirator is next switched to Standby Mode.

IMPORTANT: The respirator must be doffed by disconnecting the left-hand side first, then removing without delay. This prevents breathing from affecting the Filter Condition Check and giving erroneous results. If the filter is new and the alert sounds: place the Power Unit on a stable surface with the facepiece removed. Press the Power Button once. Allow air to flow for a few seconds. If the alarm sounds again, change the filter. If it does not sound, your filter is still good to use.

6. Care and Cleaning

6.1. CLEANING

Clean your respirator after every use. Clean all components separately. Visit www.cleanspacetechnology for detailed cleaning information.

6.1.1. FACEPIECE

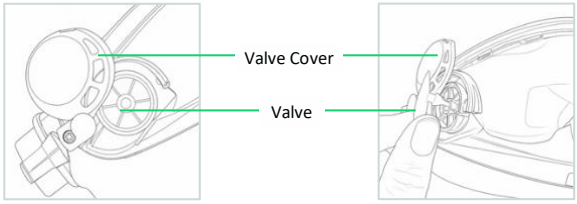
Wash the facepiece, exhalation valve, valve cover and neoprene bib thoroughly with mild detergent in warm water (less than 50°C). Rinse well in warm running water.

To inspect the silicone leaf valve: rotate the valve cover to expose the valve. Check it is in good condition and clean. Remove and wash if required (replace if damaged). Reseat the valve and rotate the cover downward until it clicks back into place.

Air dry in a clean environment or hand dry with a clean, lint-free cloth. Do not dry with direct heat. Before use, confirm the exhalation valve is seated flat and operates freely.

⚠	Never dry the facepiece or exhalation valve with a cloth that may leave lint. Lint contamination of the exhalation valve may cause it to leak, resulting in overexposure to contaminants.

Valve Replacement: To replace the silicone leaf valve: rotate the green valve cover to expose the valve. Gently pull the valve to remove it from the valve seat. Wash or replace if damaged. To insert a clean or replacement valve, gently push the pointed end of the valve into the hole in the middle of the valve seat. From the inside of the mouthpiece, gently pull the pointed end of the silicone valve until it is lying flat and is secure. Rotate the cover downward until it clicks back into place.



6.1.2. POWER UNIT

Use cleaning wipes or a cloth dampened with cleaning agent to wipe down the outside of the Power Unit. Use a clean cloth to remove any residue. Air dry or dry with a clean, lint-free cloth. For higher-level cleaning, use a Cleaning and Storage Plug.

For compatible cleaning and disinfecting agents, refer to the Compatible Cleaning and Disinfecting Agents Supplement at www.cleanspacetechnology.com.

⚠	CleanSpace Power Units contain a battery, sensitive electronics, and a motor. NEVER immerse the Power Unit in water.

6.1.3. FILTER

CleanSpace particulate filter media cannot be cleaned. The filter media is contained within a filter case. Unopened filters have a storage life of five (5) years. Dispose of the filter responsibly when a change is required. Refer to Section 2.5 for more information.

6.1.4. HEAD HARNESS AND NECK SUPPORT

The Head Harness and Neck Supports can be cleaned using the methods described for the Facepiece above.

6.1.5. PARTICULATE PRE-FILTER COVERALL

The Pre-Filter Coverall (PAF-0058) cannot be cleaned. Dispose of it responsibly when a change is required.

6.2. STORAGE

The respirator and additional components should be stored under the following conditions when not being used.

- Relative Humidity: 0% to 75%.
- Temperature: 10°C to 30°C.
- Out of direct sunlight, in a clean, dry environment.

6.3. SERVICING

It is the purchaser's responsibility to ensure that the CleanSpace respirators and components are regularly maintained to an operational standard. CleanSpace recommends annual servicing of CleanSpace respirators by an accredited CleanSpace technician. Visit www.cleanspacetechnology.com for more information.

7. Warnings and Limitations

7.1. GENERAL WARNINGS

⚠	This product is part of a system that helps protect against certain airborne contaminants. Misuse may result in sickness. For proper use, consult an Occupational Health Specialist, this User Guide, or contact CleanSpace Technology Customer Support at sales@cleanspacetechnology.com.

⚠	Properly selected, used and maintained respirators help protect against certain airborne contaminants. It is essential to follow all instructions and government regulations, including wearing the complete respirator system during all times of exposure. Misuse may result in overexposure and lead to sickness.

7.2. LIMITATIONS

Use this respirator strictly in accordance with the information contained in this User Guide and the User Instructions. Never modify or alter this product.

7.2.1. CLEANSPACE AGILE LIMITATIONS

- Please refer to your local standards and workplace guidelines to determine the respiratory protection most suited to your needs.
- Only use your respirator with approved parts and accessories.
- Do not use the respirator unless it is powered and running normally.
- Do not use the respirator while it is being charged.
- Do not submerge the respirator in water.
- Do not use in airborne contaminant concentrations above those specified in your national regulations.
- Do not use for respiratory protection against unknown atmospheric contaminants or when concentrations of contaminants are unknown or immediately dangerous to life or health (IDLH).
- Do not use in oxygen deficient or oxygen enriched atmospheres.
- Do not use in flammable or explosive environments.
- Only for use by trained personnel.
- Filters need to be changed regularly. The frequency of change depends on use and the concentration of contaminants in the atmosphere.
- Do not use for escape purposes. National regulations may impose specific limitations on the use of filters depending on the filter class and the facepiece used.
- If the respirator has been used in an area that has caused it to become contaminated with a substance requiring special decontamination procedures it should be placed in a suitable container and sealed until it can be decontaminated.
- Do not disassemble the respirator case. There are no user serviceable parts inside.
- Failure to follow all instructions on the use of this product, and/or failure to use the respirator during times of exposure, may lead to adverse effects on the wearer's health and may render the warranty void.

7.2.2. OPERATING CONDITIONS

- Temperature: -10°C to 45°C.
- Relative humidity: 0 to 90% non-condensing.

The respirator will stop functioning if its internal temperature rises above 60°C or falls below -10°C. If using at an altitude greater than 300m above sea level or less than 0m, ensure the operating altitude is set correctly by recalibrating before use (see Section 3.2).

7.3. MANUFACTURERS MINIMUM DESIGN CONDITION/DURATION

When AGILE is unable to produce a flow of 190 L/min on demand, the Low Flow Warning will sound. When the battery voltage falls to 10.8V, the Low Battery Alarm will sound.

The manufacturer's design duration in normal, breath-responsive mode is 4 hours. In Safety mode (caused by a leak or equipment issue too large to permit breath-responsive operation), the design duration is 20 minutes. Use in Safety Mode for more than a few seconds triggers an alarm.

The manufacturer's claimed duration at the MMDC is 4 hours - this is the minimum run time a user should expect. In normal use, run times of up to 7 hours are more common. Operating time is influenced by filter loading, fitment of facepiece (including bib and nosepiece), work rate, altitude, and other factors. Actual operating times may vary. To confirm your respirator can perform above the MMDC, run a Flow Test (see Section 3.3).

8. Approvals

REGION	REGULATION	STANDARD	DEVICE CERTIFICATION	QMS CERTIFICATION
CE	(EU) 2016/425	**EN 12941: 2023** TH2 P SL R	**Module B:** BSI (2797)	**Module D:** BSI (2797)

CMI: 1520-540 Wickham Street, Fortitude Valley, 4006, QLD, Australia
BSI (2797): BSI Group The Netherlands B. V., Say Building, John M. Keynesplein 9, 1066 EP Amsterdam, Nederland.
For Declaration of Conformity information, visit: https://cleanspacetechnology.com/product-resources/

9. List of Components

Type	Description	Product Code
Power System	Power System	CSA4000
Power Unit	Power Unit	CSA4001
Facepiece	Facepiece	CSA4018
Filter	Particulate Filter	CSA4005
Neck Support	Neck Support – Small	CST1019
	Neck Support – Medium	CST1020
Head Harness	Fabric Head Harness	CST1037
Accessories	Particulate Pre-Filter Coverall	PAF-0058
	Cleaning & Storage Plug	CST1024
	Carry Bag	CST3032
Spares	Facepiece Bib	CSA4007
	Exhalation Valve	CST1030
	Universal Charger	PAF-1101

For the full range of available products, visit cleanspacetechnology.com.

10. Specifications

Operation

Parameter	Specification
Weight	Power Unit: 422g, Filter: 55g, Facepiece: 148g, Neck Support (M): 8g, Head Harness: 29g
Air Flow	Minimum Design Airflow: 190 L/min. Peak Airflow: 240L/min
Operating Temperature	Minimum: -10°C, Maximum: 45°C. AGILE shuts down when battery temperature exceeds 60°C or falls below -10°C.
Operating Humidity	0 to 90%, non-condensing.
Operating Altitude	Approximately -1,000m to 4,200m.
Operating Run Time	Up to approximately 7 hours. Operating time is influenced by filter loading, fitment of facepiece (including bib and nosepiece), work rate, altitude, and other factors. Actual operating times may vary.
Ingress Protection	IP65 (cleaning only, with Cleaning & Storage Plug installed). IP54 (standard use).

Battery

Parameter	Specification
Charger	Input: 100–240VAC, 50–60Hz. Output: 14.7VDC, 24W.
Charging Temperature	0°C to 35°C. Battery will not accept charge outside this range.
Optimal Storage Conditions	10°C to 30°C and 0% to 75% relative humidity. Out of direct sunlight, in a clean, dry environment.
Battery (Type/Capacity)	Lithium-Ion - 11.1V, 1850mAh, 20.54Wh.
Recharge Time	2 hours (to 95%).

Alarms and Alerts

Alarm	Trigger	Sound / Visual
Safety Mode Alarm	Large leak or missing component detected.	1 beep every 5 seconds, 75dB(A) at ear.
Filter Change Alert	Filter has exceeded service limits.	2 beeps per second, 75dB(A). Red Filter Alarm Light flashes.
Low Battery Alarm	Remaining operating time less than 15 minutes.	3 beeps per second, 75dB(A). Single green Battery Charge Indicator light flashes.
Filter Absent Alarm	No filter detected.	Continuous beep, 75dB(A). Red Filter Alarm Light flashes.
Low Flow Alarm	Airflow cannot reach 190 l/min minimum design flow.	4 beeps per second, 75dB(A). Red Filter Alarm Light flashes.

11. Warranty

This product has been manufactured using quality parts and processes. CleanSpace Technology Pty Ltd warrants that the product is free from defective workmanship and parts for a period of two (2) years from the date of original purchase provided the product has been used, cleaned and maintained in accordance with these instructions and CleanSpace Technology's recommendations. This warranty does not include consumable parts, such as filters and half facepieces, which must be replaced regularly by the user. Consumable parts are warranted up to the point of use, provided they have been stored correctly and are within their expiry date.

This warranty does not cover:

- Where the product has been used for industrial purposes outside the recommendations of CleanSpace Technology Pty Ltd;
- Where damage has been caused by misuse, neglect, accident, or excessive wear and tear.

Any claim under this warranty must be made within two (2) years of the date of purchase of the product. All warranty claims must be made by returning the defective product to your supplier together with the proof of purchase. The purchaser is responsible for all freight. In the event that any part of the product is found by CleanSpace Technology to be defective, CleanSpace Technology will either repair or at its discretion replace the faulty part.

This warranty is given by:

CleanSpace Technology Pty Ltd
ABN 24 146 453 554,
Unit 5. 39 Herbert Street
St. Leonards, NSW 2065 Australia;
T: +61 2 8436 4000 | E: sales@cleanspacetechnology.com

This warranty is provided in addition to other rights and remedies you have under law. You are entitled to replacement or refund for a major failure. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Disclaimer:

Whilst CleanSpace Technology has made every effort to ensure that the details and information given in both our printed and online publications are accurate at the time of issue, full technical specifications are not necessarily included. Furthermore, CleanSpace Technology has a policy of continuous improvement and the right is reserved to alter details and information as the need arises. Accordingly, the Customer should check any details and information they wish to rely on with CleanSpace Technology at the time of purchase. CleanSpace Technology cannot accept liability in respect of any errors or omissions herein contained or for any loss or damage malfunction or consequential loss arising from reliance upon our publication.

The Customer will be responsible for any risk to health or safety from goods in the Customer's possession and/or control. The Customer's attention is drawn to the fact that statutory regulations and recognized codes of practice exist covering the use and handling of some goods (including safety products). The Customer must ensure that persons who use the goods receive adequate training and safety literature.

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