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AIRTEC

Powered Respirator Kit

D1257

Description

D1257 is a lightweight (950grm) respiratory protective system which is based on the principle of circulated over pressured air in the hood. The belt-mounted blower unit delivers air through a filter and via an air hose into a hood. The weight is kept close to the user's back, reducing the leverage effect that can cause some Powered Air Respirators to feel heavier. Belt-mounted units are ergonomically designed to sit at the base of the user's back, not interfere with work activities, and carry the weight mostly on the user's hips via the belt.

The supply of filtered air creates positive pressure inside of the headpiece, which prevents the external contaminated air from entering the user's breathing zone, even on inspiration.

The hood is manufactured from tough washable materials which allows a full clean down after use, or it may be disposed of in clinical waste. It is also fitted with an impact rated polycarbonate visor offering clear vison, protection from Aerosol Generated Particulate and splash protection. The hood is extremely light weight and affords the user maximum comfort whilst reducing user fatigue due to being a positive pressure system not a negative pressure system whilst providing superior protection (in comparison to disposable masks)

The hood does not require a face fit; therefore, complexity of fitting is reduced, which is highly desirable in Pandemic situations. It is suitable for all face shapes including people with facial hair, making the **D1257** system extremely versatile.

The **D1257** has an ascending 3 stage warning alarm system which consists of Visual: flashing LEDs, Audio: audio beeps and alarms and a vibration alarm. To warn the user of issues such as clogged filer, low battery or airflow restriction due a twisted hose or block.

The **D1257** is powered by rechargeable lithium ion battery with has run times between 6-8 hours depending on the run speed (8+ hours on low (180 lpm) 6 at maximum speed (220 lpm) The battery pack is also interchangeable so a second battery can be used for double shifts or heavy duty battery lasting 12 hours is also available.. The batteries themselves are able to be charged whilst fitted to the system or charged independently using our smart charger.

The smart charger is a multi-region charger and compliant to UK, US, EU and Australian plug adaptors and will work perfectly on both 220/210V and 110V.











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Applications

The **D1257** respiratory system is designed to provide filtered air to the breathing zone inside of the hood via the breathing hose.

The Hood is tested to IP54 against fluid and particle ingress.

The system uses a P R SL filter (Particle, Reusable, Protection against solids, Protection against

liquids) meaning the system can be used in environments which require a class of TH3 P R SL and below. Choice of breathing equipment is usually governed by the concentration and type of contaminate found in the air. This complete system protects against Aerosol Generated Particulate, solid and liquid particle contaminants.

Approvals

This system conforms to CE Standards EN12941 and EN166 (Soft hood):

Notified body for module B and module D

Certification EN 12941:1998+A1:2003+A2:2008 Certified by: APAVE SUDEUROPE SAS Notified Body 0082 CS60193

CEDEX 16

France

13322 MARSEILLE

This PPE device complies with the following applicable EU standards: EN166F:2001

Notified body: ECS GmbH as Notified Body1883, Obere Bahn Strasse 74, 73431 Aalen, Germany

PPE device complies with the European Regulation 425/2016 EWG)

This PPE device complies with the following applicable EU standards IEC 60529:2013 (IP54)

Notified body: CSA Group 2813 Utrechseweg 310 6812 AR Arnhem Netherlands



Standards

EN 12941:1998+A1:2003+A2:2008

This European Standard specifies minimum requirements for powered filtering devices incorporating a helmet or a hood with gas, particle or combined filter(s) for respiratory protection. It does not cover devices designed for use in circumstances where there is or might be an oxygen deficiency (oxygen less than 17 % by volume). Also, it does not cover respiratory protective devices designed for escape purposes.

Laboratory and practical performance tests are

included for the assessment of compliance with the requirements.

EN 166:2001

This European Standard specifies minimum requirements for Eye protection. Protective eye wear is tested to meet a specific set of standards and marked according to its protective ability. Which include optical class and mechanical strength.



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Materials

Plastics: ABS

Electronics: printed circuit boards

Batteries: Lithium Ion certified by Manufacturer to

UN 38 to allow safe air transportation

Spares

Filters D1258
Hood D1259
12 hour battery D1260

Use limitations

- In an atmosphere that is immediately hazardous to user hygiene or health and or has oxygen content of less than 19.5% or contains unknown substances.
- In confined spaces or unventilated areas such as tanks, pipes, canals etc.
- Near to flames and or sparks
- In areas with danger of explosion.
- In an area where there are high winds.

 If the blower unit stops working due to any reason, the user must leave the contaminated area immediately.

It is also essential that:

- Nothing is allowed to touch the moving parts.
- There is no attempt to modify or alter the unit or filter in any way
- Water or other liquids do not enter the unit- in particular the motor and fan, the filter or the battery.

Technical specifications

PAPR device certified to EN12941 TH3 PR S L

Air Flow 180 I/min - 220 I/min

Operating time 8+ hours at 180LPM (fully charged battery and clean filter)

Battery LI-Ion, 7,4v/5200 mAh, replaceable and rechargeable

Audible Alarm Insufficient air flow (below 170 l/min) Visual alarm Low battery, blocked filter (RED LED) Construction ABS, ultra light & robust

Unit weight 870g



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