

working

on the

edge



*the S.E.A.
first responder
brochure*



people

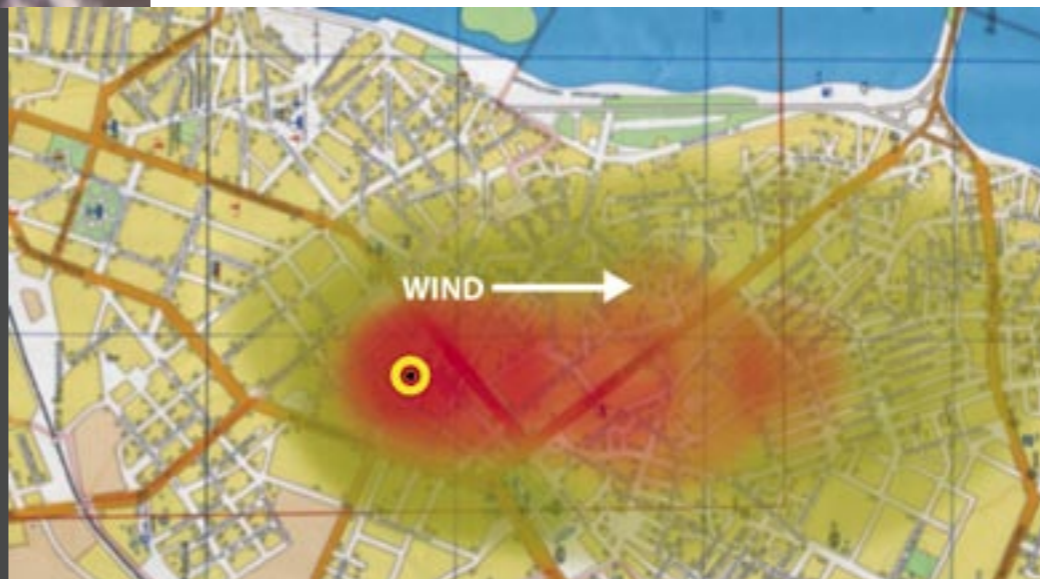
Emergency response is all about people. And about keeping people safe. To do so, emergency responders have to protect themselves first.

Professionals who respond to the emergency must be certain of their own personal safety. If they themselves aren't protected, how could they ever rescue others?

*How many will be affected?
For how long?*

It depends on the nature of the disaster, contaminants, prevailing winds, and many other factors.

Various levels of protection for specialist personnel may be required for long periods after the event.



After an incident, the hazard may linger for a long time. It may spread. Decontamination, forensics, fire investigation, structural work, clean-up — all may require comprehensive personal protection.

Whatever the task, it is crucial to have the right protection for the right kind of job. In this line of work, over-protection can be just as dangerous as not having enough.



The S.E.A. system of respiratory protection for emergency personnel is a comprehensive range of equipment suitable for all work performed in case of an incident.

From filter respirators to positive pressure units and pressurised full body protection, S.E.A. system thinking means that all parts work together to form a highly effective safety solution.

System

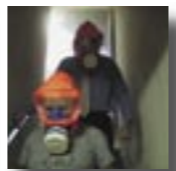
First response



Decontamination of casualties



Rescue operations



Emergency escape



Site investigation



Crowd control



Hospital transport



Medical & forensic

Hot zone

Warm zone

Cold zone

INTERACTIVE KNOWLEDGE

MORE PRODUCT INFO:

www

theseagroup.com

POSITIVE pressure respirators



SE400 used during 'Operation Apollo' in preparation for the Sydney Olympic Games

The world's only positive pressure fan-supplied breath-responsive demand respirator designed for CBRN

SE400 is used by military, police, ambulance, forensic, medical, rescue, emergency and response units all around the world.



SE400 used by emergency services in Australia

MORE PRODUCT INFO:
www.theseagroup.com



A few reasons why SE400 is ideal for emergency response:

- Extremely high protection levels
- Positive pressure even at heavy work
- No breathing resistance
- Long operation times (4h or longer)
- High mobility
- Loud and clear voice communication
- Full integration with the SE-shield range of suits

True positive pressure at work rates requiring peak flows over 460 l/min. That means easy breathing and full protection even when performing very heavy work.

Protection levels comparable to SCBA in filtrable, non-IDLH atmospheres containing enough oxygen for human breathing.

Superior protection against CBRN and other toxic materials (see section on filters).

Single battery typically lasts 4 hours at moderate work. Dual battery available.

Breath-responsive demand operation means 50% longer filter life compared to continuous-flow respirators.

Microprocessor operation with continuous self-checks.

Visual and audible alerts of low battery, mask pressure, end of filter life and other events. Warning light always in user's field of vision.

Microphone in the face piece connects to external pocket loudspeaker or loudhailer.

Carry on backpack or waist belt.

Full integration with encapsulated, pressurised suits of various materials.

Full range of accessories.

Should motor switch off for any reason, the unit becomes a negative-pressure respirator, allowing safe escape from hazard zone.

MORE PRODUCT INFO:
WWW
theseagroup.com



Tyvek F model



PVC model

SE-shield includes a range of suits that are fully integrated with the SE400 positive pressure respirator, thus achieving full body protection along with respiratory protection.

The suits are available in various materials, including PVC and VPS for chemicals and gas, and Tyvek F, the true first responder suit, for chemicals and warfare agents.



SE-shield can withstand wet decontamination without the need to remove the respirator even at very high water pressure

Tyvek F model

- Fully integrated with the SE400 positive pressure respirator
- Internally pressurised
- Filters connected through completely airtight seals
- Double hood with bib for complete seal, even during vigorous bending, moving, turning, stretching and other body movements
- Booties and gloves permanently welded onto suit
- Tested against a wide variety of chemicals and warfare agents, such as mustard gas, Lewisite and VX
- Disposable — designed for single-use only



Fitted with a special breathing hose featuring a bleed valve, the fan unit of the SE400 inflates the suit with clean air and maintains a positive pressure.

The wearer always has priority over pressurisation. When you are not breathing in air, the suit is inflated.

This not only contributes to the perceived cooling and ventilation of the suit, but also keeps inward leakage down to 0.1% typically.



Clean air is channelled into the suit.

suits

power

The SE400 battery management system (known as "BattMan") lets you store, manage and condition up to 28 batteries at the same time. The system is ideal for long-term storage of batteries. Batteries are drained, recharged and conditioned automatically from a single powerpoint.



Recharging/discharging/conditioning routine that maintains batteries in optimum condition

Every battery has its own individual LED indicator showing the current status

Sturdy, stackable, military-style case with strong snap-locks

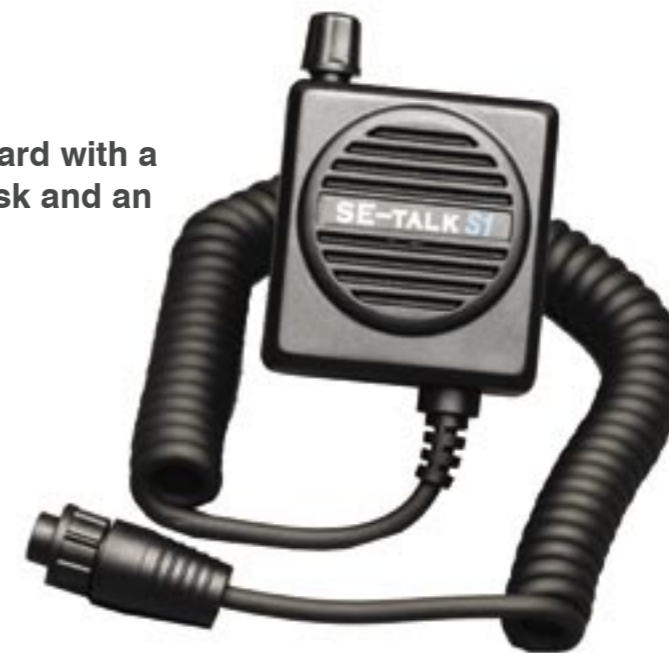
Entire unit uses one single powerpoint

Unit can be operated even when closed and locked



SE400 communication

The SE400 respirator comes standard with a non-electric microphone in the mask and an external amplifier/loudspeaker.



Self-locating, water-resistant plug

Powered by fan unit — no extra battery needed

ON/OFF/volume control can be used to switch on the fan unit

Button can also be used to trigger de-misting of the visor through a rapid burst of air

Clip on rear for fastening onto shoulder straps or breast pocket

Rugged, knurled control button can be operated while wearing thick gloves

Extra socket for connection to megaphone or two-way radio — ideal for crowd control and teamwork between responders



The Dual2 system allows two batteries to power the SE400 respirator for longer without changing batteries.

No modification needs to be done to the fan unit.

Ideal for extended work routines where battery change is impractical or difficult

Perfect for use with SE-shield suits

Ni-Mh batteries

No 'memory effect'

2-hour recharge time approx.

Single battery typically lasts 4 hours at moderate work

Batteries mounted on shoulder straps for balance. No added weight to fan unit



Full face mask communication

The S.E.A. negative pressure full face mask can easily be fitted with SmallTalk, a device which enables loud and clear voice communication while wearing the respirator

Can be fitted in seconds and removed without a trace

Long-lasting, standard 9V battery

Clip on rear for fastening onto shoulder straps or breast pocket

Rugged, knurled control button can be operated while wearing thick gloves

Extra socket for connection to loudhailers etc.

voice

negative pressure respirators



The S.E.A. full face respirator has been specifically developed for emergency responders and domestic preparedness personnel who work in environments that do not require mandatory positive pressure respirators and full body protection.

Fitted with Domestic Preparedness filters and electronic communication, the S.E.A. full face respirator is ideal for such activities as crowd control, hospital transport, dealing with decontaminated people, and similar activities.

Halo-butyl rubber compound material for great resistance against a wide variety of materials, including chemical and biological warfare agents

Panorama view visor

Optional single-action cloth head harness for rapid donning

Plastic film speech diaphragm for good voice transmission

Can easily be fitted with optional SmallTalk microphone and loudspeaker

Spectacles easily fitted inside mask

Used with S.E.A. threaded domestic preparedness filters



The S.E.A. Domestic Preparedness filters are designed for use with both negative pressure respirators and the SE400 positive pressure demand respirator.

The filters provide extremely high protection levels against particles, gases and biological materials that may be released in fires and explosions, as well as malicious acts such as release of warfare agents, biological hazards, radioactive materials, nerve gas and more.

Used against particles, dust, smoke, fumes, bacteria, viruses, biological warfare agents, and a wide range of organic, inorganic and acid gases and ammonia.

Examples: sarin, nerve gas, mustard gas, cyanogen, phosgene, radioactive dust, toxic particles, aerosols, tear gas, bacteria, viruses, anthrax, smallpox etc.

Also provides protection against gases and vapours likely to form in fires and explosions, such as ammonia, hydrogen cyanide, acid gases, chlorine, sulfur dioxide, hydrogen chloride and many more.



Also available: high efficiency particle filter



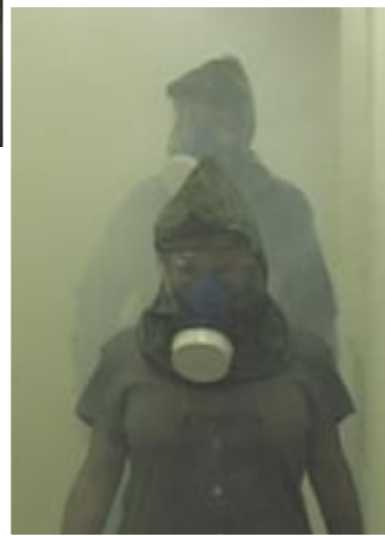
filters

escape

response



Emergency escape hoods are vacuum sealed in handy packs for rapid use. The hood is easily fitted without practice or training. The device guards against eye irritation and breathing hazards during evacuation of a building.



Flame and chemicals resistant material

Incorporates a silicone half mask with a gas and particle filter

Provides protection against dust, chemicals and warfare agents such as nerve gas, sarin, anthrax, smallpox, tear gas, mustard gas, as well as the big killer in many fires: carbon monoxide (CO)

Easy to put on without any adjustment

Supplied in vacuum-sealed container with a storage life of 15 years (filters 7.5 years)

Easily fitted with optional microphone and loud-speaker for effective voice communication by team leaders, floor supervisors etc.

Supplied in handy nylon contingency bag

SEVERAL MODELS AVAILABLE



First responder's kits are a practical way to always be at the ready. Ideal for ambulance services, fire brigades, police patrols and other outfits where a sudden need for breathing protection may arise.

MORE PRODUCT INFO:
WWW
theseagroup.com



Case made of rugged ABS material

Tough enough to stand on

Stackable

Large handle and lock tabs - easy to grab, lock and unlock with gloves on

Moulded styrene insert keeps contents in place

Cell-foam padding eliminates rattling and contents moving around in the case

Heavy-duty hinges and snap-locks



SEVERAL CONFIGURATIONS AVAILABLE

REACTORS



Wet decontamination



Victim transport



SARS outbreak, SE Asia



Decontamination



Rescue operation, Australia



Airport emergency, SE Asia



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SPECIALISTS IN RESPONDER SAFETY.