



Press Release

Ref: HEAD10

Date of Issue: 17 June 2014

HEAD10 is an award winning respiratory protection used for escape. HEAD10 is a lightweight, ergonomic, closed circuit hooded apparatus, providing the wearer with a safe, simple and effective means of escape from irrespirable atmosphere from toxic gasses, oxygen deficiency or smoke.

In an environment where toxic or asphyxiating atmospheres could be experienced the consequence of being unable to escape safely could be disastrous. Escape sets are a much needed piece of safety equipment that allows personnel to safely escape a hazardous environment of this type.

The HEAD10 has been developed using 'chemical oxygen' (Potassium Superoxide - KO_2) to generate oxygen and allow carbon dioxide (CO_2) to be removed from the breathable air. The initial start up phase incorporates a chlorate candle that is activated as the set is removed from its packaging while also initiating the self-check alarm procedure. The first out breath of the wearer through the generators commences the generation of oxygen and removal of carbon dioxide.

The wearer can move unhindered as the HEAD10 fast and easy to don and with no straps, valves or activation system, it operates hands free. The hood allows for excellent panoramic vision while the automatic starting system and built in alarm further assist with safety.

An alarm, once set, stays quiet for $\frac{2}{3}$ of the usable air time after which an audible alarm sounds and LED lights flash showing $\frac{1}{3}$ of the air remains. Once this time is complete, a constant alarm sounds. This last alarm provides a safety margin whereby a measure of breathable air is still forthcoming but indicates that the user must reach clean air.

HEAD10 is supplied in either a wall-mounted box or a bandolier carry bag, and is sealed in an aluminium foil vacuum container. A unique visual indicator and security tag constantly shows the unit's integrity and condition.

For training purposes, training sets without the 'chemical oxygen' are used. They appear the same as the user would wear in an emergency but allow for inhalation of the surrounding air rather than created Oxygen as with the 'live' sets. Once the on-site train the trainer course is completed companies can train new employees themselves. Using these sets also ensures that no 'live' sets are out of commission for training.

There is no need for servicing for an initial 9 years with only a 6 year validation check off site required. The financial benefit is a cost saving of 36% compared with similar products on the market resulting in major through life savings when using HEAD10.



SHP IOSH Awards 2008



Safety & Health Expo 2001 –
Product Innovation Awards HEAD 10

**CE 120 (EC Directive 89/686EC)
ATEX Directive 94/9/EC**

-ENDS-

Notes to editors

How HEAD works

When the user breathes out, water vapour is released which combines with potassium superoxide (KO_2) in the unit resulting in oxygen and potassium hydroxide. This potassium hydroxide (KOH) reacts with exhaled carbon dioxide (CO_2) to produce potassium carbonate (K_2CO_3). Result – oxygen given and carbon dioxide taken away.

Photo Caption:

About Semmco:

Semmco, established in 1993, is a design, engineering and manufacturing company offering a range of specialist services to the rail, aviation, industrial and military markets for service and maintenance of rolling stock, planes and specialist equipment and plant. The company is known as a UK leader for quality in its field.

Within the Rail market Semmco designs and manufactures a comprehensive range of access solutions - Rail Roof Access, Rail Access Steps, Rail Front Access Steps, Rail Modular Access Steps and Rail Fixed Gantry.

Within the Aviation market, Semmco designs and manufactures a comprehensive range of access solutions - Aircraft Engine Access, Engineer Maintenance steps, Cargo Bay Access and among other access platforms.

Providing engineering design and consultancy for special projects and bespoke customer requirements, the company is committed to quality, safety and reliability through innovative designs, while manufacturing cost effective engineered solutions.

Based in Woking, Surrey, the company supplies equipment across the UK and around the world.

For Additional Information

Tel: 01483 757200

Email: ammie@semco.com