

ULTIMATE PROTECTION



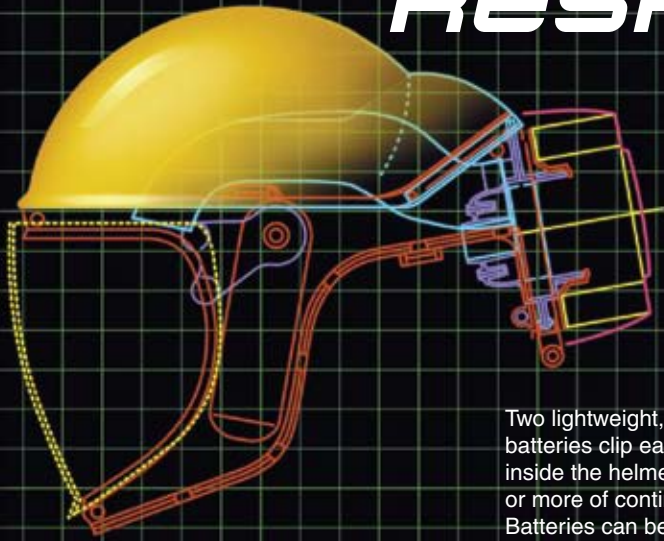
Pureflo[®]
ESM

ELECTRONIC SYSTEMS MANAGEMENT

**30 DAY
FREE
TRIAL**
CONDITIONS
APPLY

INTERACTIVE
SAFETY PRODUCTS

ADVANCED POWERED RESPIRATORY HELMET



The Pureflo ESM respiratory helmet is the ultimate personal safety solution for industrial environments providing all-in-one, head, eye, face and respiratory protection against hazardous airborne contaminants, sparks, flying debris, chemical and molten metal splashes.

Lighter, smaller and more powerful than any previous model this unique, battery powered, positive pressure system delivers a constant, plentiful supply of clean air, to meet the demands of even the most extreme working conditions.

With no trailing leads or belt mounted attachments the Pureflo ESM is completely self-contained and more convenient to use, enabling the wearer to move freely from task to task without any restrictions – even in close working environments.

Two lightweight, rechargeable batteries clip easily into position inside the helmet providing 6 hours or more of continuous operation. Batteries can be fully recharged within 2 1/2 hours without removing them from helmet.

The high efficiency HE P100 filter prevents the inhalation of potentially harmful particulates, and liquid/solid aerosols from the surrounding atmosphere while the helmet/face-shield combination protects the head, eyes and face from impact or liquid splashes.

The adjustable neck cape maintains the positive pressure zone within the helmet and face-shield while offering additional protection to the lower face and neck.

The Pureflo ESM incorporates a unique, state-of-the-art Electronic Systems Management by using an on board CPU to constantly monitor filter usage, battery life and airflow to ensure optimum performance at all times.

This innovative, industry proven system eliminates the cost and inconvenience of supplying, stocking and maintaining separate safety helmets, bump caps, brow guards, face-shields, dust masks, half and full face respirators.

Additional options include the Pureweld ESM, a welding shield accessory, a gold coated visor, 5.0 green for gas welding and burning applications.



Applications include:

- **Welding**
- **Cement manufacture**
- **Ceramics**
- **Powder mixing**
- **Foundry**
- **Grain handling**
- **Laboratories**
- **Lead manufacture**
- **Metal working**
- **Oil refining**
- **Pharmaceutical**
- **Rubber and plastic manufacture**



Pureflo[®]
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ELECTRONIC SYSTEMS MANAGEMENT

THE UNIQUE PUREFLO ESM POSITIVE PRESSURE, FILTERED AIRFLOW SYSTEM



Pureflo ESM works by drawing air from the surrounding environment through a high efficiency, HE P100 filter located at the rear of the helmet, which removes any liquid or solid based contaminants. The system enables the wearer to use a decontamination shower as the design inhibits water ingress.

An external head mounted switch activates the helmet's battery powered operation. Operational noise level is reduced by the advanced filter housing and fan design to below 70 dB internal noise level.

Clean, breathable filtered air is then channeled directly to the interior of the face shield at a constant flow rate of 7.6 cf/min or 210 liters/min and exits through an innovative exhalation patch located in the rear of the attached neck cape.

This unique air circulatory system creates a smooth, continuous flow pattern, delivering the optimum air supply to the wearer with the minimum of resistance.

A booster switch can be manually activated to increase the airflow to 8.2 cf/m or 230 liters/min to meet the demands of hotter and more extreme working conditions.



Unique Head Mounted Display (HMD)



Fixed or flip up visor options available



Radiant heat kit/tinted gold visor option

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ULTIMATE PROTECTION FOR YOUR WORKFORCE

The adjustable neck cape when sealed creates the self-contained positive pressure environment, providing additional protection to the lower face and neck area.

Sophisticated Electronic Systems Management (ESM) continually monitors all functions and provides preuse self diagnostic systems check

Unique Head Mounted Display (HMD) incorporates LED and audio signals to warn the wearer when battery is low or filter needs replacement

Dedicated, high efficiency HE P100 particulate filter has three times more filtration area than normal, lasting longer and reducing operating costs – no prefilter needed

Face-shield is manufactured from high impact-resistant polycarbonate with anti-mist, anti-scratch coating

Choice of hard-hat or bump cap versions with fixed or flip up face-shields

ASSIGNED PROTECTION FACTOR (APF) 1000



Face-shield seals securely against the helmet frame for optimum protection against impact or splashes and when locked reduces entry of external contaminants from outer surface

Unique 4-point adjustable cradle and fail-safe ratchet control system enables the helmet to be quickly and easily adjusted for different head sizes and shapes, achieving optimum comfort, balance and fit

Power is delivered by two environmentally safe, rechargeable nickel hydride batteries that clip snugly into position to deliver about 6 hours of continuous use

Batteries can be charged in place or externally out of the helmet in approximately 2.5 hours using our lightweight multi-pin smart charger

Innovative design allows easy replacement of parts and accessories reducing the annual maintenance and operating costs



Mesh visor option



Lamp bracket attachment option



Easy to fit accessories

THE NEW STANDARD

FOR VARIOUS HEXAVALENT CHROMIUM PROTECTION

The Pureweld ESM powered air purifying respirator (PAPR) helmet is the ultimate personal safety solution for welding applications and industrial environments providing an all-in-one respiratory, eye, face and head protection against airborne particulate contaminants including hexavalent chromium applications, flying debris, sparks, cutting, chemical and molten metal splashes.

With no belt pack, down hose or trailing leads to get in the way, the Pureweld ESM is completely self contained, easy to use and convenient allowing the wearer to be able to move freely without restrictions even in tight spaces.

The new 16 battery multi-charger allows up to 16 ESM batteries to be charged at one time. Perfect for the users with multiple Pureflo ESM or Pureweld ESM units.



16 Battery Multi-Charger

ULTIMATE PROTECTION AGAINST HAZARDOUS PARTICULATE CONTAMINATES

With an APF of 1000, the highest allowed for a PAPR helmet unit, the Pureweld ESM combines a hard hat with the welding shield accessory into a user friendly helmet system that significantly cuts annual operating and maintenance costs.

The high efficiency HE P-100 filter prevents the inhalation of harmful and hazardous particulates while the face-shield and helmet combination protects the wearer from impact, head, eye and face hazards.

The Pureweld ESM incorporates an on board CPU system that constantly monitors filter usage, battery life and airflow to ensure optimum performance at all times.

With an APF of 1000, the Pureflo ESM was independently tested to a minimum average of 31,000 in accordance with NIOSH Testing Procedure No. CET-PAPR-STP-CBRN-552.



5.0 green visor option



Gold on clear visor option



SPECIFICATIONS

UNITED STATES & CANADA

APPROVALS	Pureflo Bump Cap PF50 ESM	Pureflo Hard Hat PF60 ESM
System Classification	Powered Air Purifying Respirator	Powered Air Purifying Respirator
Head Protections	-	ANSI Z98.1.2003
Face-Shield/Eye Protection	ANSI Z87.1-2003	ANSI Z87.1-2003
Respiratory	NIOSH 42CFR Part 84KK	NIOSH 42CFR Part 84KK
Filter Type	High Efficiency P-100	High Efficiency P-100
Initial Design Flow Rate	7.6 cf/min or 210 liters/min	7.6 cf/min or 210 liters/min
Boost Mode Flow Rate	8.2 cf/min or 230 liters/min	8.2 cf/min or 230 liters/min
Noise Level	Under 70 dB (based on OSHA 29 CFR 1910.95 Subpart G)	Under 70 dB
Weight	3.2 lbs with batteries	3.3 lbs with batteries
Assigned Protection Factor (APF)	1000 APF *	1000 APF *
FM	Class I, II, III, Div 2, Groups ABCDEFG	Class I, II, III, Div 2, Groups ABCDEFG
CSA	Class I, II, III, Div 2, Groups ABCDEFG	Class I, II, III, Div 2, Groups ABCDEFG
Head Size Range	6 3/8"-7 7/8" or 54-61 cm	6 3/8"-7 7/8" or 54-61 cm
Charger Specifications	110V / 240V ac/ 50 or 60 Hz/ 200 mA	110V / 240V ac/ 50 or 60 Hz/ 200 mA
Battery Type	5 Cell Nickel Metal Hydride 6V 1.8 Ah per pack	5 Cell Nickel Metal Hydride 6V 1.8 Ah per pack
Battery Duration	6± Hours with two batteries	6± Hours with two batteries
Recharge Time	2.5 Hours from full discharge	2.5 Hours from full discharge

Electronic Systems Management (ESM)

LED/Audio pre-use-check	Audible warning, 1 Red LED on 20 seconds, changes to green LED on
LED/filter OK	3 Green on - New filter
LED/filter OK	2 Green on - Indicates filter usage
LED/filter OK	1 Green on - Indicates short filter life
LED/filter alert	1 Red on - Filter shows restriction
LED/filter alert	1 Red on - Audible warning. Change filter immediately
Airflow Boost Mode	3rd Green LED flashing
Low Battery Alert	All LED's flashing, Audible Alert

* Independently tested with a minimum factor of 31,600 according to NIOSH Testing Procedure No. CET-PAPR-STP-CBRN-552

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