

# WELDING safety respiratory system

Welding-focused filter devices



## INTRODUCTION

The respirator injects ambient air through the filters into the head protection via a corrugated tube.

The assisted ventilation reduces the respiratory effort and the fatigue generated by the use of a respiratory system. Tornado protects especially where protection is required for long periods and is of particular benefit in hot or humid environments.

The overpressure generated within the hood allows a high protection nominal factor.

These products should not be used in atmospheres immediately dangerous to life, in confined spaces or in atmospheres deficient in oxygen (less than 19.5%).

## 2 models with a wide range of hoods and masks:



### The TORNADO engine

- Intrinsic safety (I.S.) – anti-static polypropylene construction, suitable for use in potentially explosive gas and dust atmospheres
- Electronic flow control – maintains correct airflow as the working environment changes
- Use of the Tornado PSL or A2-PSL cartridges in presence of gas and organic or inorganic vapours



### The Proflow3Ex Engine

- ATEX approved, the Proflow 3 EX is suitable for use in explosive atmospheres
- Microprocessor control of the flow for a safe, fast and accurate flow regulation
- Use with the pro2000 type 3 or A2B2-P3 cartridges
- It provides robust protection against volatile AX gases in presence of gas and organic or inorganic vapours

## FOREWORD

Welders are exposed to a range of fumes and gases (evaporated metal, metal oxides, hydrocarbons, nanoparticles, ozone, oxides of nitrogen) depending on the electrodes, filler wire and flux materials used in the process, but also physical exposures such as electric and magnetic fields and ultraviolet radiation.

Fume particles contain a wide variety of oxides and salts of metals and other compounds, which are produced mainly from electrodes, filler wire and flux materials. Fumes from the welding of stainless-steel and other alloys contain nickel compounds and chromium.

Ozone is formed during most electric arc welding, and exposures can be high in comparison to the exposure limit, particularly during metal inert gas welding of aluminium. Oxides of nitrogen are found during manual metal arc welding and particularly during gas welding.

Welders who weld painted mild steel can also be exposed to a range of organic compounds produced by pyrolysis. Welders, especially in shipyards, may also be exposed to asbestos dust.

## **FH4** Respiratory and Face Protection for Welders

The FH4 is suitable for a variety of welding applications whilst offering a comfortable lightweight solution. The headtop offers two distinct features that will allow the wearer ease of use and comfort. The Scott ratchet mechanism allows the wearer to secure the headtop in place and ensures an easy customisable fit, whilst the head cradle is pivotable allowing the user to "flip up" the visor after welding. This visor can be securely locked in the upright position if required and pulled down in one simple movement.

- Stylish and modern
- Lightweight & comfortable with fully adjustable ratchet headgear
- Available with a choice of ADFs- 2500V & 5500V
- Available with hose options: PU stretch, EPDM (standard & long versions)
- Available with Tornado & Proflow 160 PAPR (Proflow 120 l/min users can upgrade to 160l/min via service centre).



Welding visor

## **FH61** Headtop

To a user of powered air the prime drivers in determining suitability are the comfort and performance of a headtop, the FH61 headtop provides the highest levels of comfort and wearer acceptance.

- Integrated helmet, visor and welding shield with optional ear defenders
- Electronic variable auto-darkening lens and passive lenses available
- Safety helmet and rail-mounted retractable visor with flexible chin seal and outer welding shield
- TH2 Class approved to EN14941
- EN166, EN169, EN175 and EN397 approved.



Helmet and welding visor

## **FM2** Full facemask

To a user of powered air the prime drivers in determining suitability are the comfort and performance of a facemask, the FM2 full facemask provides the highest levels of comfort and wearer acceptance.

- Natural rubber front-port facemask
- Large visor area and broad face seal
- Single size full facemask also approved for unpowered use with Pro2000 filters
- TM3 Class approved to EN14942.
- EN136 approved



Welding visor and FM2

## **FM3** Full facemask

To a user of powered air the prime drivers in determining suitability are the comfort and performance of a facemask, the FM3 full facemask provides the highest levels of comfort and wearer acceptance.

- Choice of halo-butyl and silicone materials
- Side entry hose improves comfort and balance
- Full facemask available in two sizes, also approved for unpowered use with Pro2000 filters
- TM3 Class approved to EN14942
- EN136 approved.



Welding visor and FM3