



POWERED AIR PURIFYING RESPIRATOR



4 IN 1 FULLY INTEGRATED PROTECTION

The NEW Powercap® Infinity® PAPR – a fully integrated TH3 powered air respirator offering 4 of the highest levels of protection in one intuitive head mounted unit. Giving the wearer complete above the neck 4 in 1 protection. PowerCap® Infinity®, the perfect choice for many industries where dust poses a great danger to health. The unit provides the very latest in Powered Air Purifying Respiratory technology, combining decades of innovation from JSP in the fields of respiratory, head, eye and face protection.



**VIDEO &
INFORMATION**

<http://bit.ly/PowerCapInfinity>



RESEARCH. DEVELOP. TEST.

The PowerCap® Infinity® has been designed by the JSP R&D team, inspired by feedback received from workers who regularly have to wear Powered Air Purifying Respirators (PAPR). The goal was to fully understand the issues these users face and to develop a unit that performs above and beyond any other unit on the market.

RESEARCH

During the initial research period we found that wearers of some existing units reported that they were heavy, would underperform when under pressure and have unclear, complex warning systems. A common theme reported by users was heat build-up and restriction of movement when wearing a waist mounted filter unit. It became clear that a fully integrated solution was needed, combining head, eye, face, respiratory and hearing protection into one self-contained powered unit.



POWERFUL TWIN TURBO PERFORMANCE

Designed from the ground up to deliver unrivalled performance. PowerCap® Infinity® is fully loaded with performance enhancing technology, neatly packaged into a single head top unit eliminating the need for cumbersome / restrictive waist mounted units and hoses.

OPTIMAL TWIN TURBO AIR FLOW

For prolonged user comfort it is important to control the movement of air inside the respirator. JSP, in partnership with leading motorsport aero dynamicists used computational fluid dynamics to develop a highly efficient twin impeller system. The patented Twin Turbo Technology controls the airflow through the headtop to maximise user comfort and optimise energy efficiency. Real time diagnostics ensure that the twin impeller motor unit delivers the optimum level of airflow depending on the wearer's demands and regulates the intake and internal pressure delivering a minimum of 160 litres a minute of filtered clean air.



Patented
twin turbo
technology



PERFECT FIT TO COMBAT DUST

Dust in the workplace is a significant issue. The latest HSE figures (2017) show that 18,000 new cases of work related respiratory disease were diagnosed. A significant proportion of these were the result of exposure to silica. While the problem is widely acknowledged and use of respiratory equipment is high, it is often not suitable for the person or the environment it is being used in.

NO NEED TO FACE FIT TEST

Suitability of tight fitting filtering RPE is assessed by face fit testing, in many cases this is not done or there are errors in the test carried out or the subsequent use of equipment. One of the biggest factors is facial hair. The HSE issued a number of reports showing the results of fit testing for individuals with varying degrees of facial hair. JSP have carried out a number of tests and found, like the HSE, that a tight fitting mask works very well when the wearer is clean shaven but performance levels drop quickly when the user has facial hair. PowerCap® Infinity® removes the need for fit testing, ensuring that a high volume of clean air is delivered to the breathing zone giving a high level of protection.



No need to
FACE FIT test

MINIMAL MAINTENANCE

PowerCap® Infinity® has been developed as a modular system, making it easy to disassemble and reassemble for ease of cleaning and maintenance. To ensure the optimal performance of PowerCap® Infinity® it is important that maintenance is carried out on a regular basis.

The main components can be cleaned down with a damp cloth or brush. Care needs to be taken with the visor, it should not be wiped with a damp cloth as this could lead to scratching, but should be rinsed under running water. The face seal can be easily removed for machine washing with a mild detergent at 30°C.



**FITTING &
CARE VIDEOS**

<http://bit.ly/Infinity-videos>



TECHNICAL SPECIFICATION

PowerCap® Infinity® has been developed with many international directives and standards in mind, not just performance ones but also environmental ones:

The Waste Electrical and Electronic Equipment Directive (WEEE Directive) that sets collection, recycling and recovery targets for all types of electrical goods to ensure that the unit can be broken down at its end of life and recycled as easily as possible.



The requirements of REACH, the European Union regulation concerning the Registration, Evaluation, Authorisation and restriction of Chemicals to ensure that all parts of the PowerCap® Infinity®, particularly those parts in long term contact with the wearer are innocuous and not likely to cause any adverse reactions

The Restriction of Hazardous Substances directive restricts the use of hazardous materials in the manufacture of electronic and electrical equipment, these are Lead (Pb), Cadmium (Cd) and Mercury.

Batteries are often referred to as "UL compliant", a term that covers a number of standards that have been developed to ensure batteries, such as the PowerCap® Infinity® PowerBox2™ are designed to have clear labelling and protection against short circuiting, among other aspects, to promote safer carriage of the batteries.



Respiratory protection	
EN12941	✓ European standard for powered filtering respiratory devices incorporating a helmet or hood
TH3P R SL	Indicates a 99.8% efficiency for protection against particle – solids & liquids with an APF 40 – reusable
Head protection	
EN397	✓ European standard number for industrial safety helmets
LD	The helmet will provide some protection from lateral compressive loads
MM	The helmet will provide some protection against molten metal splash
Eye & face protection	
EN166	✓ European standard for protective eyewear
1	Optical quality (high)
B	Protection against medium energy impact against high speed particles
Scratch Resistant	✓
Optional hearing protection standard	
EN352-3	✓ European standard for helmet mounted hearing protection – For details about the Sonis® range of hearing protection see the Sonis® pages in this guide
PowerCap® Infinity® general performance & statistics	
Weight	1200g
Head size range	53 – 63cm The size range of the helmet, head circumference
Battery type	Rechargeable Lithium-ion 3.6V, 5.2Ah, 18.72 Wh. Expected life of 500 cycles when charged, stored and used in accordance with the user instructions
Battery run time	8 Hours
Battery charge time	8 Hours to fully charge



WHY USE HEARING PROTECTION?

The World Health Organisation has identified noise-induced hearing loss as being the most common permanent and preventable injury in the world. With tinnitus now the third most serious non-fatal medical condition it is little wonder that hearing protection has been raised to category III in the new PPE Regulation.

WHAT IS CATEGORY III?

PPE Regulation (EU) 2016/425 is mandatory, and is categorised as follows:

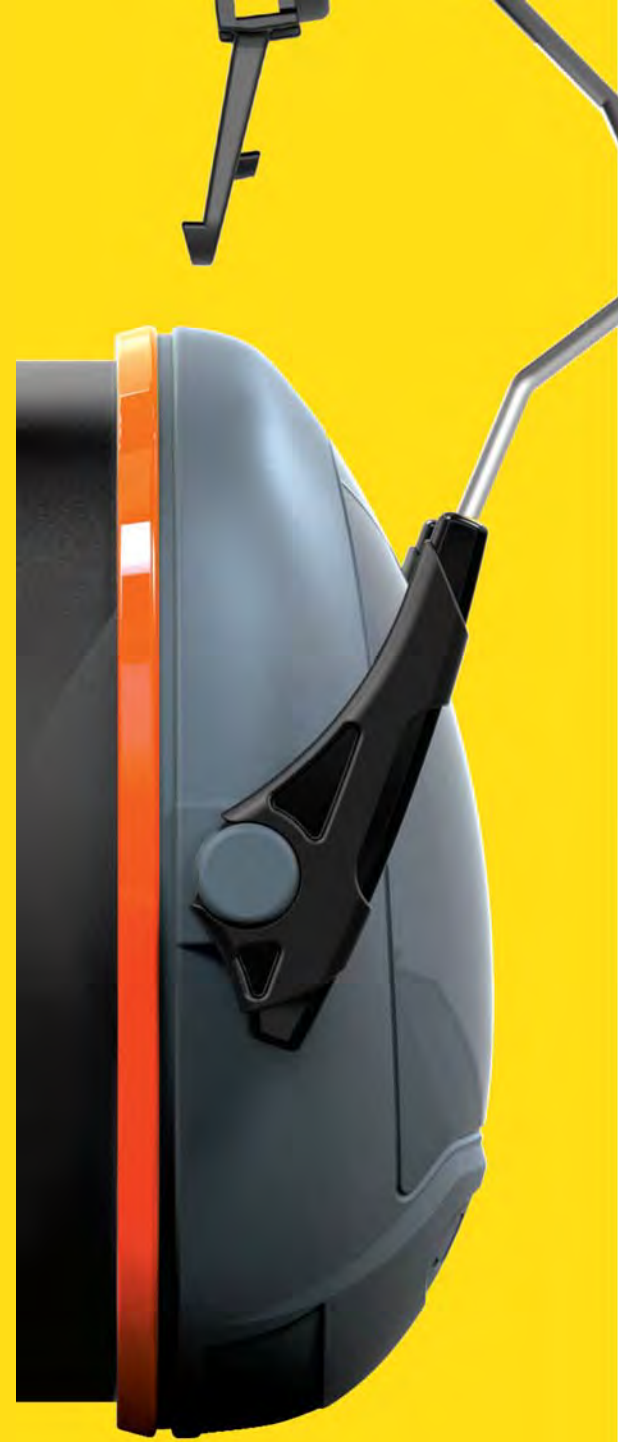
- Category I – simple PPE
- Category II – intermediate PPE
- Category III – complex PPE

Category III as defined in the PPE Regulation 'includes exclusively the risks that may cause very serious consequences such as death or irreversible damage to health'. With harmful noise now rated category III it is essential that the correct hearing protection is selected.

After four years of research, development and significant investment JSP are proud to launch the new Sonis® high performance ear defender range.



View fitting and maintenance videos:
<http://bit.ly/SonisHow2>





POWERCAP
INFINITY



"From time of pour to finished floor...we've got you covered"