# TECHNICAL SPECIFICATION

## Powercap® Infinity® Respirator

Black / CEA646-001-100




### DESCRIPTION

The PowerCap® Infinity® PAPR – a fully integrated TH3 powered air respirator offering four of the highest levels of protection in one intuitive head-mounted unit. Offering 4-in-1 above the neck protection, PowerCap® Infinity® is the perfect choice for many industries where dust poses a danger to health. The unit represents 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.

### OPTIONS

**Black (CEA646-001-100)**

Blue (CEA646-000-500)

White (CEA646-000-100)

### SAFETY STANDARDS

EN 12941 • EN 397 • EN 166 • ANSI/ISEA Z89.1 Type I

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## SPECIFICATIONS

Impact Resistance
50 Joules

Resistance to Molten Metals and Hot Solids (optional)
Yes - Helmet Only

Minimum Temperature
+5°C

Recyclable
Shell

Depth Adjustment
3D Harness

Ventilation
No

JSPCheck
Yes

Usage
P R SL (A Reusable Solid & Liquid Particulate Aerosol Filter)

Minimum Filtration Efficiency
99.8%

Nominal Protection Factor
500

Mask Design
A Turbo Hood Powered Air Purifiying Respirator (Loose Fitting)

Latex free
Yes

Filter Shelf Life
5 Years

Battery Type
Rechargeable Lithium-ion 3.6v, 5.2Ah, 18.72Wh. Expected Life Of 500 Cycles When Charged,Stored and Used In Accordance With User Instructions

LIGHT TRANSMISSION BREAKDOWN Lens Shade number
1.2

Optical Class (1 – Class 1 – High quality for regular use. 2 – Class 2 – Medium quality for occasional use. 3 – Class 3 – Low quality for exceptional use)
1

Resistance to Molten Metals and Hot Solids (optional)
9

Product Weight
1042g

Face Fit Testing Required
No

Lateral Deformation
Yes

Maximum Temperature
+50°C

ABS Shell
Yes

Textile
Harness

Slip Ratchet
Wheel

Reflective Option
Fitted

Classification
TH3

Exhalation Valve
Twin Exhalation Valve To Reduce CO2 Build-Up

Maximum Total Inward Leakage (TIL)
0.2% When Fitted To PowerCap® Infinity® Respirator

UK Assigned Protection Factor
40

Face Seal Type
Hypoallergenic Material

Metal Free
No

Filter Material
Pleated Media

RADIATION PROTECTION BREAKDOWN filtering effect Scale Number
2

Manufacturer's Trademark
JSP Dagger

Medium Energy Impact resists a 6 mm, 0.86g ball @ 120 m/s Maximum protection for goggles.
B

BSI Kitemark
Yes

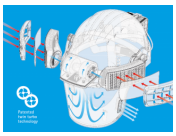
Noise Level
61.1dB

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## FEATURES



### Powerful Twin Turbo Performance

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.



### Smart PPE

Real time diagnostics monitor the system and the wearer twice per second, giving the user accurate, dynamic feedback. Periods of high respiratory demand are monitored and catered for by constantly maintaining a positive pressure inside the respirator. Feedback is given on battery and filter condition via the heads up display and audible notifications.



### High Efficiency Filters

The high capacity HEPA filters coupled with the aerodynamically optimised pre-filter covers ensure that PowerCap® Infinity® delivers 160 litres per minute of clean air to the user with maximum battery efficiency. Filters can be effortlessly replaced using an intuitive quick-change bayonet system.



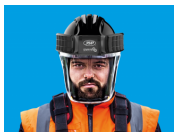
### Ear Defenders

The PowerCap® Infinity® has been developed to seamlessly integrate with the optional Sonis® helmet mounted ear defenders. Designed by the JSP R&D team and working with a leading UK acoustic engineering research facility, the Sonis® helmet mounted range includes an SNR 26, while the Sonis Compact has an SNR of 31 and then peaks at an unbeaten SNR 36dB. The helmet adaptor and the cushion surface area work together to provide optimum cushion pressure and comfort.



### 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

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.



### Head Protection

PowerCap® Infinity® is built around the super strong ABS shell of the EVO®5 Olympus® industrial safety helmet. Fitted with the Revolution® Flex wheel ratchet harness, the helmet is designed to reduce pressure for the perfect fit and all-day comfort.



### Panaromic Impact Visor

The optical class 1 visor conforms to EN166.B offering impact protection at speeds of up to 270 mph (tested using a 6mm steel ball bearing). The visor has a replaceable peel-off visor protector to prolong its life.



### Tested to the MAX

Hundreds of hours of human treadmill tests were conducted in a purpose built salt dust challenge chamber to optimise mass, balance and sealing elements. Extensive user trials were conducted, putting the PowerCap® Infinity® to the test in a variety of harsh conditions.



### 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. No specialist tools required.

## RANGE

## VIDEOS

youtu.be/jS1Fr-xVS1I

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