

5 THINGS THAT

RESPIRATORY
PROTECTIVE
EQUIPMENT MUST
'DO' OR 'BE' TO
EFFECTIVELY
PROTECT
WEARERS

DP033



HAYLEY DEXIS

RESPIRATORY PROTECTIVE EQUIPMENT

The Control of Substances Hazardous to Health (COSHH) Regulations 2002 legislates employers must protect employees as much as possible from exposure to potentially harmful substances. Respiratory protective equipment (RPE), containing filters that prevent particles of differing sizes from being inhaled, is a tool used to lower risk. Although RPE should be considered as a last resort in your efforts once all other practical measures have been implemented, it is often a necessary investment.

Correctly selecting RPE requires knowledge of the hazardous substances present, the form of the hazard (solid, liquid, gas, or vapour), the concentration of hazard(s) in the air, and also the type of work being carried-out. Consideration also needs to be made to the individual wearing the equipment and any specific needs that they have.

In this article, we've picked-out five key things that RPE needs to 'do' or 'be' to provide effective and long-lasting respiratory protection for workers.

1. PROVIDE ADEQUATE PROTECTION

The main aim of RPE is to provide adequate protection for the wearer. Any hazardous materials in-use within the workplace will be supplied with a safety data sheet (SDS), which can be used to determine any preventative steps that will reduce risk levels. For anything that may not be categorised as a hazardous material, but remains capable of producing potentially damaging particles, you will need to focus on the type of work being done to understand the risks.

The capabilities of the filter(s) within the RPE are crucial to how the respiratory protection performs in stopping hazards from being inhaled. For instance, a respirator fitted with a filter effective against solid or liquid particles, wouldn't provide any protection where hazardous gases or vapours are present.

The assigned protection factor (APF) of each RPE type and class indicates how much protection is offered. It is recommended by the Health & Safety Executive (HSE) that you should select an APF above the calculated value of the volume of hazardous substance in the air, to ensure protection.¹

2. BE SUITABLE FOR INTENDED USE

RPE must be suitable for the use in which it's employed. Activities such as grinding, sanding, cutting, paint spraying, welding, and the use of solvents can produce harmful respiratory hazards that release into the air. Once the form (solid, liquid, gas, or vapour) and concentration/volume (ppm / mg/ m3) of the respiratory hazard has been identified, you can begin to narrow down the options suitable for you.

All RPE also needs to be suitable for the wearer. All tight fitting equipment should be Face Fit Tested to ensure that it fits comfortably to the wearers' face. Facial hair and accessories such as glasses and piercings should not interfere compromise the sealing ability of masks.

Suitability considerations for the wearer's work rate, wear time, and vision requirements also needs thought. For instance, the HSE recommends that tight fitting respirators are worn only for hourly intervals, and if the work rate of the wearer is high, increased breathing and perspiration could impact their experience. If wear time is required for over an hour continuously, or work rate is mediumto-high, then powered air systems need to be considered.



3. BE OF AN APPROVED TYPE/ STANDARD

RPE available for use in the UK must be manufactured in accordance with the Personal Protective Equipment Regulations (2002), and therefore bear the CE/UKCA mark. This mark signifies that the product has been assessed and found to meet high safety, health, and environmental protection requirements, deeming it fit for the European/UK markets respectively. Only products with these marks have been designed and tested to meet at least the minimum requirements laid-out in law, making them the only choice.

4. BE USED CORRECTLY

The RPE provided to staff can only be effective if wearers have the appropriate level of awareness and knowledge to use the equipment correctly. It is the employer's responsibility to arrange adequate training for RPE wearers, to ensure that employees are sufficiently protected whenever there is a risk of inhalation. Training sessions should not only cover the correct use of equipment, but also why the RPE is necessary, as well as how users should store, clean, maintain and dispose of the equipment.

5. BE PROPERLY STORED & MAINTAINED

The appropriate storage, cleaning, and maintenance of RPE is critical in prolonging its service life, preserving its ability to protect its users whilst making the most out of the company's investment in the equipment.

Manufacturer's guidelines should be followed at all times, with regular checks conducted to ensure that these guidelines are being upheld. Reusable RPE should undergo inspection at recommended intervals, and any maintenance processes carried-out should be documented, with records retained for at least five years, as recommended by the HSE.¹

HAYLEY DEXIS works in partnership with marketleading PPE manufacturers, such as 3M, to provide genuine and quality products for our customers.

CONTACT US!

Speak to your local branch today about your RPE requirements.

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1. Health and Safety Executive (2013) Respiratory Protective Equipment at Work: A Practical Guide (HSG53). 4th Edition. Available from: https://www.hse.gov.uk/pubns/priced/hsg53. pdf. [Accessed: 06/01/2022].



