Introduction to Respiratory Protection

To help you meet Health & Safety Executive demands for personal protection, the SCAN respiratory range offers an extensive range of disposable masks and respirators.

The Hazards

Dust

Formed by the breaking down of solid materials, normally when materials are altered. For example, sanding, cutting, grinding and brushing. In general the smaller the dust particle the greater hazard that it represents. Fibres from materials should also be treated as dusts.

Vapour

A gaseous state formed by evaporation from substances that are normally either solid or liquid at room temperature (e.g. methylated spirits, petrol). Many industrial processes used in degreasing vapourise particularly quickly once heated.

Fumes

Formed by the vaporisation of a solid material by the application of intense heat. Extremely fine particles are formed as fumes cool and condense. Many processes form fumes; such as smelting, pouring metals and many welding applications.

Mist

Formed by processes that involve atomisation (such as spraying, cleaning and cutting/grinding using coolants) and consist of tiny liquid droplets rather like steam in a bathroom.

CONFORMS TO EN149:2001 A1:2009

Filtering Face Piece for Particulates

Designed to cover the nose, mouth and chin.
The construction is made of the filter material itself.
To be disposed of after each period of work or 8 hour shift (max).

Understanding the Standard

EN Number	Filter/ Class	Allowable Penetration	APF	NPF
EN149	FFP1	20%	4 x OEL	4
	FFP2	6%	10 x OEL	12
	FFP3	1%	20 x OEL	50

APF - Assigned Protection Factor
Level of respiratory protection that can be expected to be achieved in the workplace by 95% of adequately trained and supervised wearers using a properly fitted and functioning respiratory protective device.

OEL - Occupational Exposure Limit
The OEL is the 'Safety' line decided upon by the Health and Safety Executive.

NPF - Nominal Protection Factor
The potential maximum protection factor using the maximum percentage inward leakage permitted for a given standard class of respiratory protective device, expressed as a ratio:

$$\frac{100\%}{\%\ \text{allowable inward leakage}}$$

Half Mask Respirators
CONFORMS TO EN140

The European standard that covers the technical specifications for half masks which cover the nose, mouth and chin. They have their face piece manufactured from natural or synthetic based rubber allowing the mask the flexibility to fit the contours of the face.

Half Mask Respirators
CONFORMS TO EN143

Covers particle filters. These are classified according to their filtering efficiency P1, P2 and P3. P1 filters are intended for use against solid particles only, P2 and P3 filters are subdivided according to their ability to remove both solid and liquid particles or solid particles only.