Head Protection Product Guide

The head is one of the most vital parts of the human body to safeguard, and consequently the use of head protection is heavily governed by HSE legislation and written into the safety policies and training programmes of many companies'. Head Protection is widely used across general industry, including construction/civil engineering, oil/gas and chemical processing and automotive plants to name a few.

The choice of head protection comes down to either a safety helmet or a bump cap, and a full risk assessment should be carried out prior to the selection of head protection to determine which one is necessary for the application and meets the legislation.

When should head protection be worn?

Although it is worth pointing out once more that wearing head protection is the last line of defence against a potential injury and everything possible to avoid the risk should have been implemented prior to letting personnel work in a hazardous area, even with the best attention to detail accidents do happen. As a general rule it is necessary to wear a safety helmet in almost every industry where there is a risk of being struck and possibly injured by falling objects.

In some lower risk applications, for example, in areas of restricted head space where accidental bumping of the head could be involved (e.g. overhead piping) a Bump Cap could be considered. Bump caps are not a substitute for safety helmets and must not be used to protect the head from falling objects, but in many applications they can be a more comfortable and stylish piece of PPE for the workforce.

What are the key things to consider when selecting head protection?

Standards – Products specified must conform to the relevant EN standard
Comfort – Consider weight, ventilation, eight point head harnesses, sweatbands etc
PPE connectivity – many industries require the additional use of face and hearing protection. Consider the range of PPE connectivity available when specifying a helmet.
Wearer appeal – as well as comfort the styling and visual appearance of head protection is important to the wearer. An important part of enforcing the wearing of head protection is that the user likes what they have to wear; they have to wear it all day after all in many instances.

Accessories

Safety helmets generally come with a whole range of accessories and options which can be specified on an initial order or retrofitted at any stage. Accessories include a variety of head gear types, which have an affect on comfort, different sweatband materials, ear defenders, integrated or helmet mounted eye or face shields and winter liners.

Corporate Branding

Corporate identity is now a big part of head protection. Both safety helmets and Bump Caps can be branded with a logo of your choice, often in multiple positions. It is not just promotional advantages that can be gained from using your brand, there is a sense of pride and uniformity for the staff and also and element of heightened security for the workplace.

Shelf Life

To comply with European Standards, all helmets are marked with the quarter or month and year of manufacture. If helmets are stored in boxes in which they were supplied and do not experience environmental extremes, the shelf life of a helmet is not limited. However, it is not recommended that a helmet should be in use 5 years after date of manufacture.

Identifying and choosing materials

Shells are primarily made using UV stabilised high density Polyethylene (HDPE) a rugged and cost effective material, ABS (Acrylonitrile Butadiene Styrene) a high grade and rugged polymer. Polycarbonate is also a popular material with good dimensional stability, high impact and heat resisting properties. Harnesses are made using low density Polyethylene or Terylene webbing.

Care and maintenance

A helmet may be cleaned with soap and water, drying with a soft cloth. A helmet should not be cleaned with abrasive substances or solvents and must not be stored in direct sunlight or in a place where it can come into contact with chemicals. The wearer should inspect a helmet regularly. Any helmet showing more than superficial abrasions or scuffing to the shell should be replaced.

Explaining the standards

EN 397 specifies physical and performance requirements of industrial safety helmets. Certain tests are mandatory if the product is to receive EN 397 approval.

These include: Shock absorption ~ Resistance to penetration ~ Flame resistance ~ Chinstrap anchorage

A manufacturer can choose to submit their products to additional optional tests. Which tests a manufacturer has decided to submit for are clearly marked on the helmet.

-20/-30°C The helmet will provide some protection when worn in an environment at or above this temperature.

440V a.c. The helmet will protect against short term, accidental contact with live electrical conductors up to this voltage.

LD The helmet will provide some protection from lateral deformation.

MM The helmet will provide some protection from Molten Metal splash.

EN 812 is the standard for Industrial Bump Caps, which are intended to provide protection against bumps caused by walking into hazardous projections. A Bump Cap does not provide protection against falling or thrown objects and should not be used where a safety helmet is required.