HEAD PROTECTION:

The main objective of the hard hat is to protect the head against hazards and mechanical impacts, lateral crushing, collisions with stationary objects or falling objects. It can also protect against other risks of mechanical, thermal or electrical nature.

Shell, comprising:

- Cap. hard material element and of smooth finish which constitutes the general external shape of the hard hat.
- Peak. It is an extension of the hard hat above the eyes.
- Wing. It is the edge surrounding the hat.

Harness: It is the complete set of elements which constitute ameans of keeping the hard hat in position on the head and absorbing kinetic energy during impact.

Compulsory tests: they are applied to all types of hard hats, whatever the purpose for which they are intended: shock absorption capacity, resistance to perforation and resistance to flame. **Optional tests:** they are applied to safety hard hats designed for special user groups: dielectric resistance, resistance to lateral deformation and resistance to low temperatures.

EN 397 HELMETS FOR INDUSTRIAL USE: Protects against bumps, falling objects, electrical contacts, etc... They can incorporate additional features which give them protection against other risks.

HAZARDS	Origin and formof hazards	Factors to be considered fromthe point of view of safety when choosing and using equipment
Mechanical actions.	Falling objects and collision.	Attenuation capacity to collisions.
		Mechanical actions Resistance to perforation.
	Lateral crushing.	Lateral rigidity.
	Tips of plastic welding gun.	Resistance to shots.
Electrical actions.	Low voltage.	Electrical insulation.
Thermal actions.	Cold or heat.	Maintaining protection functions at lowand high temperatures.
	Melting metal projection.	Resistance to melting metal projections.
Lack of visibility	Insufficient perception.	Colour signalling / retroreflection.
Discomfort and inconvenience at work.	Insufficient use comfort.	Ergonomic design: Weight, height at which it should be worn, Adaptation to the head, Ventilation.
Accidents and health hazards.	Bad compatibility.	Qualities of the materials.
	Lack of hygiene.	Ease of maintenance.
	Bad stability, hard hat falling.	Maintaining the hard hat on the head.
	Contact with flames.	Incombustibility and resistance to flame.
Impairment of the protective function due to aging.	Weather elements, environmental conditions, cleaning, utilization.	Equipment's resistance to industrial aggressions.
		Maintaining the protective function for the entire life of the equipment.
Insufficient protective efficacy.	Bad choice of equipment.	Choice of equipment depending on the nature and importance of the risks and industrial constraints: Compliance with the manufacturer's directions (instructions of use) Compliance with the equipment's marking (e.g. protection types, marking corresponding to a specific use).
		Choice of equipment according to the individual factors of the user.
	Bad use of the equipment.	Appropriate use of the equipment and knowledge of the risk.
		Compliance with the manufacturer's directions.
	Dirty, wear or damage to the equipment.	Maintaining in good condition.
		Periodic checks.
		Timely replacement.
		Compliance with the manufacturer's directions.

